NOAA

ENVIRONMENTAL COMPLIANCE PROGRAM

TEAM HANDBOOK FOR:

CHEMICAL INFORMATION MANAGEMENT SYSTEM (CIMS) AND POLLUTION PREVENTION (P2) PROGRAM TEAM

MISSION STATEMENT

The mission of NOAA's Environmental Compliance Program is -

To ensure that the Agency, its employees, and affiliates conduct their activities in an environmentally responsible manner that:

- **Complies with applicable laws, regulations, and Executive Orders;**
- **Contributes to a safe and healthful workplace;**
- **Safeguards the community and natural environment.**

VISION STATEMENT

The guiding vision of NOAA's Environmental Compliance Program is

Environmental concepts will be integrated totally into the organization, and will become an inherent part of all NOAA operations and activities.

GOALS

The Goals of NOAA's Environmental Compliance Program are -

Goal 1: Restore Contaminated Properties.

Goal 2: Ensure Environmental Compliance and Pollution

Prevention.

Goal 3: Sustain Environmental Compliance through Environmental Management Systems.

TABLE OF CONTENTS

TAB D OTHER FEDERAL AGENCY IMPLEMENTATION OF CIMS-P2

- Department of Defense Mission and P2 Strategy

TAB E USEFUL REFERENCE MATERIALS

- CIMS Users Group Meeting Minutes, September 30, 1997
- CIMS Users Group Meeting Minutes, October 28, 1997
- CIMS Users Group Meeting Minutes, December 16, 1997
- CIMS Users Group Meeting Minutes, July 7, 1998

TAB A
MANDATORY DOCUMENTS

1.0 NOAA ENVIRONMENTAL COMPLIANCE PROGRAM TEAMS

1.1 TEAM GUIDING PRINCIPLES

Sustainable environmental systems built by teams will allow NOAA to assure environmental compliance. All teams will consider the five Guiding Principles of Environmental Sustainability in Table 1(modified from Angela Park of The Catalyst Company):

TABLE 1
FIVE GUIDING PRINCIPLES OF
ENVIRONMENTAL SUSTAINABILITY
(modified from Angela Park of The Catalyst Company)

- **Integration:** Taking the systems approach to solving problems and making decisions
- **Anticipation:** Thinking long term and being proactive, because "time" does matter; failure to anticipate can be costly in terms of money and human resources
- **Participation:** Involving stakeholders; promoting teams; partnerships; and joint ventures; and building alliances as processes that achieve meaningful outcomes
- **Efficiency:** Using resources more wisely: pollution prevention and energy conservation are better than end-of-pipe and wire "fixes"
- **Equity:** Moving away from purely technical solutions to solutions that incorporate considerations that are important to stakeholders

1.2 RELATIONSHIP AMONG AGENCY, TEAMS, AND EMPLOYEES

The three Goals will be achieved through teams, dedicated staff, NOAA's Environmental Compliance Network, and strategic partnerships. The relationships among the key implementation components of the agency, team and employee are shown in Table 2.

TABLE 2
RELATIONSHIP AMONG AGENCY, TEAMS, AND EMPLOYEES

CATEGORY OF ACTIVITY	AGENCY	TEAM	EMPLOYEE [Program & Project Managers]
PURPOSE	o NOAA Environmental Compliance Program's Strategic Plan (goals & objectives) o NOAA Environmental Compliance Program's Implementation Plan (activities & outcomes) o NOAA Environmental Compliance Program's Annual Operating Plan (milestones)	o Team's charter o Team's Multiyear Plan of Action & Milestones o Team's Budget Estimate Plan of Action & Milestones o Team's Annual Plan of Action & Milestones	Employee Performance Plan: critical elements based on the Code of Environmental Management Principles. [Program/ Project manager's Employee Performance Plan includes critical sub-elements related to program or project, and manager must develop: o Program's/ project's Multiyear Plan of Action & Milestones o Program's/ project's Budget Estimate Plan of Action & Milestones o Program's/ project's Annual Plan of Action & Milestones.]
PROCESS	Management systems Code of Environmental Management Principles	Business methods and procedures	Performance indicators: quality, teamwork, and customer service
EVALUATION	o Annual Program Performance Reports o Periodic Program Evaluation (every 3 years)	Annual Team Performance Report	Annual employee Appraisal Record

[1] Modified from *The Team Handbook by P.R. Scholtes, B.L. Joiner, B.J. Streibel (1996)*

GOAL 3: SUSTAIN ENVIRONMENTAL COMPLIANCE	AUDIT TEAM	CIMS - P2 TEAM	TRAINING TEAM	INFORMATION TECHNOLOGY TEAM	CHIEF OF ENVIRONMENTAL STAFF
3.1 MANAGEMENT COMMITMENT					
3.1.1 Management Support					
3.1.1.1 Policy Development					X
3.1.1.2 System Integration	X	X	X	X	X
3.1.2 Environmental Stewardship	X	X	X	X	X
3.2 COMPLIANCE ASSURANCE AND POLLUTION PREVENTION					
3.2.1 Compliance Assurance	X	X	X	X	X
3.2.1 Emergency Preparedness		X			
3.2.3 Pollution Prevention & Resource Conservation		X			
3.3 ENABLING SYSTEMS					
3.3.1 Training			X		
3.3.2 Structural Support	X	X	X	X	X
3.3.3 Information Management, Communication & Documentation				X	
3.4 PERFORMANCE & ACCOUNTABILITY					
3.4.1 Responsibility, Authority & Accountability	X	X	X	X	X
3.4.2 Employee Performance Standards	X	X	X	X	X
3.5 MEASUREMENT & IMPROVEMENT					
3.5.1 Evaluation Performance					
3.5.1.1 Gather/ Analyze of Data	X				
3.5.1.2 Institute Benchmarking	X	X	X	X	X

3.5.2 Continuing Improvement	X	X	X	X	X

2.0 STRATEGIC PLANNING WORKSHOP'S MULTIYEAR OUTCOMES

TABLE 3
STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES: CIMS AND P2 PROGRAM TEAM

GOAL 1: RESTORE CONTAMINATED PROPERTIES

OBJECTIVE 1.1 Identify Scope of Contamination: Complete identification and characterization of contaminated properties using Cleanup and Restore the Environment (CARE) assessments.

ACTIVITY: Develop business methods and procedures for recording past and current facility hazardous materials activities.

STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES	PERFORMANCE MEASURES
A. By 2000, track current spills in CIMS. *Information on past spills will be gathered as part of the auditing process. The CIMS/P2 team will coordinate with the auditing team to prepare procedures for documenting historic contamination and ensuring that accurate and up-to-date records are kept on site contamination.*	100 percent of NOAA applicable facilities/operations in CIMS or a comparable method of tracking information
B. By 2002, baseline current hazardous materials usage. (See Goal 2, Activity for Objective 2.1)	100 percent of NOAA applicable facilities/operations in CIMS or a comparable method of tracking information

GOAL 2: ENSURE ENVIRONMENTAL COMPLIANCE AND P2

OBJECTIVE 2.1 Identify Scope of P2 Problems: Identify chemicals and current environmental compliance, and health and safety issues using NOAA's CIMS and using audit protocols.

ACTIVITY: Baseline chemical usage at NOAA operations.

STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES	PERFORMANCE MEASURES
A. By 2000, have 30 percent of NOAA operations' inventories in CIMS.	Reduction in hazardous waste generation
B. By 2001, have 50 percent of NOAA operations' inventories in CIMS.	Reduction in hazardous waste generation
C. By 2002, have 100 percent of NOAA operations' inventories in CIMS.	Reduction in hazardous waste generation
D. By 2003, analyze baseline data (determine types and amounts of chemicals being used at NOAA's facilities [results to be used for Objective 2.2 activity]).	Reduction in hazardous waste generation

OBJECTIVE 2.2 Correct Pollution Problems: Correct compliance issues on a project list

TABLE 3
STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES: CIMS AND P2 PROGRAM TEAM

priority basis using EPA's project prioritization factors.

ACTIVITY: Develop strategy for systematically reducing chemical usage and waste generation at NOAA facilities.

STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES	PERFORMANCE MEASURES
A. See Objective 3.2, multi-year outcomes B., C., D., and E.	Reduction in hazardous waste generation

OBJECTIVE 2.3 Prevent Pollution Problems: Apply P2 approaches to reduce the quantity and toxicity of wastes generated and pollutants released by NOAA's operations.

ACTIVITY: Develop strategy for systematically reducing chemical usage, energy consumption, and waste generation related to NOAA operations.

STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES	PERFORMANCE MEASURES
A. By 1999, in compliance with EO 12843, determine strategy and develop an implementation plan for reducing the use of ozone depleting substances (ODS) throughout NOAA, and modify procurement specifications to substitute non-ozone depleting substance for ODS.	NOAA is ODS free by 2005.
B. By 1999, in compliance with EO 12856, develop measures and reduce NOAA's total releases and transfers of EPCRA Section 313 toxic chemicals by 50 percent. *By December 31, 1999, each facility subject to EPCRA reporting requirements is required to reduce total releases and off-site transfers of toxic chemical from a 1994 toxic release inventory baseline. The aggregate amount of the reduction shall be 50 percent or greater. The amount of toxic releases and off-site transfers will be measured in pounds.*	Reduction in hazardous waste generation.
C. By 1999, develop a written NOAA-wide P2 strategy consistent with the Department of Commerce's strategy to comply with the requirements as specified in Sections 3-302 through 3-305 of Executive Order 12856.	Reduction in hazardous waste generation.
D. By January 1, 1999, (due date of September 14, 1998 has been exceeded) in compliance with EO 13101, establish baseline and goals for solid waste prevention and recycling and establish methods for documenting solid waste generation and recycling rates at each facility.	Reduce solid waste generation.

TABLE 3
STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES:
CIMS AND P2 PROGRAM TEAM

E. By 1999, develop and distribute NOAA policy statement on sustainable development.	Reduce construction related waste generation.
F. By 2000, all NOAA new construction and modernization activities will follow the sustainable development policy.	Reduce construction related waste generation.
G. By 2000, develop guidance documents for facilities on NOAA's P2 strategy.	Reduction in waste generation
H. By 2000, create NOAA policy on energy audit sub-program.	Reduction in energy consumption
I. By 2000, implement the Section 313 sub-program.	Reduction in waste generation
J. By 2000, develop energy conservation chart for quarterly review (develop mid-year).	Reduction in energy consumption
K. By 2001, 50 percent of NOAA-owned square footage will have undergone an energy efficient audit and prepared a strategy for replacing equipment with energy efficient units.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA-owned facilities (adjusted for inflation).
L. By 2001, each NOAA facility subject to EPCRA reporting requirements shall develop a local P2 team and conduct a pollution prevention opportunity assessment (P2OA) to identify opportunities for pollution prevention. *The P2 teams will continually identify opportunities for P2.*	Reduction in waste generation
M. By 2001, create water efficiency audit sub-program.	Reduction in water consumption
N. By 2002, in compliance with EO 12856, each NOAA facility subject to EPCRA reporting requirements shall develop a P2 plan. *Each pollution prevention plan shall include waste generation data for a baseline year (no later than 1994) and specific plans for reducing the amount of waste generated in future year from the amounts generated during the baseline year. This plan will be submitted to headquarter for review.*	Audit facilities in 2002 to ensure all P2OA were conducted. Review P2 plans for completeness.
O. By 2002, implement the recommendations of the energy audit.	Reduction in energy consumption
P. By 2002, implement water reduction sub-program at 5 percent of NOAA's facilities.	Reduction in water consumption

TABLE 3
STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES: CIMS AND P2 PROGRAM TEAM

Q. By 2003, implement water reduction sub-program at 10 percent of NOAA's facilities.	Reduction in water consumption
R. By 2003, develop a plan for reducing or eliminating extremely hazardous substances (EHS). *The plan shall include a baseline indicating the amount (in pounds) of EHSs purchased by NOAA in 2000. The plan shall include appropriate substitutes for EHSs or discuss alternatives that would not require the use of such materials.*	Query CIMS to determine amounts of EHSs reduced. Ensure reduction amounts correspond to amounts specified in plan.
S. By 2003, develop method for and track energy savings.	Reduction in energy consumption
T. By 2004, implement water reduction sub-program at 20 percent of NOAA's facilities.	Reduction in water consumption
U. By 2004, 75 percent of NOAA's operations are ODS free.	Reduction in hazardous waste generation
V. By 2004, implement the EHS sub-program.	Reduction in hazardous waste generation
W. By 2005, implement water reduction sub-program at 30 percent of NOAA's facilities.	Reduction in water consumption
X. By 2005, 100 percent of NOAA-owned square footage will have undergone an energy efficient audit and prepared a strategy for replacing equipment with energy efficient units.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA-owned facilities (adjusted for inflation).
Y. By 2005, in compliance with EO 13202, reduce overall energy and water use in all buildings by 30 percent by significantly increasing the use of solar and other renewable energy sources.	Reduction in hazardous waste generation and energy consumption
Z. By 2005, in compliance with EO 12844, procure and use alternatively fueled vehicles where possible to reduce toxic and hazardous air pollutants (prioritizing for non-attainment areas).	Reduction in energy consumption
AA. By 2005, in compliance with EO 12845, ensure that all computer equipment purchased meets the EPA "Energy Star" energy efficiency requirements.	Reduction in energy consumption
BB. By 2005, NOAA is 100 percent ODS free.	Reduction in hazardous waste generation
CC. By 2005, implement the EHS sub-program.	Reduction in hazardous waste generation
GOAL 3: SUSTAIN ENVIRONMENTAL COMPLIANCE THROUGH ENVIRONMENTAL	

TABLE 3
STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES:
CIMS AND P2 PROGRAM TEAM

MANAGEMENT SYSTEMS - CODE OF ENVIRONMENTAL MANAGEMENT PRINCIPLES

OBJECTIVE 3.2 Compliance Assurance and Pollution Prevention: NOAA and its Line/Staff offices and facilities implement proactive programs that aggressively identify and address potential compliance problem areas and utilize P2 approaches to correct deficiencies and improve environmental performance.

ACTIVITY 3.2.1. Compliance Assurance: NOAA will implement the strategies created to ensure protection of the environment and worker safety.

ACTIVITY 3.2.2. Emergency Preparedness: NOAA and its line and staff offices and their facilities develop and implement programs to address contingency planning and emergency response situations.

ACTIVITY 3.2.3. P2 and Resource Conservation: NOAA and its line and staff offices and their facilities develop and develop programs to address P2 and resource conservation.

STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES	PERFORMANCE MEASURES
A. By 1999, implement PEHS/receive approval of the PEHS process.	Dr. Baker and line offices accept PEHS review process. Reduction in audit findings, chemical usage (need to normalize data). Roll playing to determine employee knowledge of the process.
B. By 2002, perform PEHS review of 30 percent of current activities.	Reduction in hazardous waste generation
C. By 2003, perform PEHS review of 60 percent of current activities.	Reduction in hazardous waste generation
D. By 2004, perform PEHS review of 80 percent of current activities.	Reduction in hazardous waste generation
E. By 2005, perform PEHS review of 100 percent of current activities.	Reduction in hazardous waste generation
F. One year after the development of a sub-process, incorporate it into PEHS.	Reduction in hazardous waste generation
G. Annually, NOAA will review the effectiveness of the PEHS process and all of the sub-processes. *Include feedback in decision making process.*	Reduction in hazardous waste generation

OBJECTIVE 3.3 Enabling systems: NOAA and its line and staff offices and their facilities develop and implement the necessary measures to enable personnel to perform their functions in a manner that is consistent with regulatory requirements, NOAA's environmental policies and

TABLE 3
STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES:
CIMS AND P2 PROGRAM TEAM

NOAA's overall mission.

ACTIVITY 3.3.1. CIMS/P2: NOAA and its line and staff offices and their facilities ensure that personnel understand and implement procedures where their actions effect the environment and health and safety.

ACTIVITY 3.3.2. Structural Supports: NOAA shall ensure that personnel understand and implement procedures where the actions of their employees affect human health or the environment.

ACTIVITY 3.3.3. Information Management, Communication, and Documentation: NOAA and its line and staff offices and their facilities develop and implement systems that encourage efficient management of environmentally-related information, communication, and documentation.

STRATEGIC PLANNING WORKSHOP'S MULTI-YEAR OUTCOMES	PERFORMANCE MEASURES
A. By 1999, develop and implement a communication strategy.	Feedback survey on web page (is it easy to navigate, etc.)
B. By 1999, develop version 1.0 of CIMS	Reduction in hazardous waste generation
C. Evaluate Communication Strategy.	
D. By 2000, create standard policies for implementation related to the management of chemicals. - Develop tools to aid in the implementation of the policy (complete development of Version 1.0 of an electronic system for tracking hazardous material inventories) - Develop best management practices (BMP) to achieve P2 and waste minimization.	Less than 5 calls on the same training topic per month.
E. By 2000, implement CIMS help line.	Less than 10 complaint calls per month.
F. By 2001, refine system (Version 2.0), and implement Version 1.0 of the system nationwide.	Reduction in hazardous waste generation
G. By 2002, make final refinements to the system (Version 3.0).	Reduction in hazardous waste generation

3.0 TEAM CHARTER

NOAA
CHEMICAL INFORMATION MANAGEMENT SYSTEM (CIMS)
POLLUTION PREVENTION (P2)
PROGRAM TEAM
CHARTER

1. PURPOSE AND AUTHORITY. The purpose of the CIMS/P2 Program Team is to (a) develop an integrated chemical management system to ensure safety of employees and protection of the environment, and (b) develop a program to ensure green construction, maintenance, and modernization activities at NOAA-owned facilities.

Authority for this effort comes from the NOAA Environmental Compliance Program Strategic Plan, September 1998, and the Implementation Plan which are in accordance with the Government Performance and Results Act and the U.S. Department of Commerce's policy embracing the Code of Environmental Management Principles for Federal Agencies.

2. OBJECTIVES AND SCOPE OF ACTIONS.

a. **OBJECTIVE 1.1 Identify Scope of Contamination:** Assist in the complete identification and characterization of contaminated properties using Cleanup and Restore the Environment (CARE) assessments.
2. **OBJECTIVE 2.1 Identify Scope of P2 Problems:** Identify chemicals and current safety and environmental compliance issues using NOAA's CIMS and environmental compliance audit protocols.
3. **OBJECTIVE 2.2 Correct Pollution Problems:** Correct compliance issues on a project list priority basis using EPA's project prioritization factors.
4. **OBJECTIVE 2.3 Prevent Pollution Problems:** Apply P2 approaches identified in facility P2 plans to reduce the quantity and toxicity of wastes generated and pollutants released by NOAA's activities on the Nation's lands.
5. **OBJECTIVE 3.2 Compliance Assurance and Pollution Prevention:** NOAA and its Line/Staff offices and facilities implement proactive programs that aggressively identify and address potential compliance, health, and safety problem areas and utilize P2 approaches to correct deficiencies and improve environmental performance.
6. **OBJECTIVE 3.3 Enabling systems:** NOAA and its line and staff offices and their facilities develop and implement the necessary measures to enable personnel to perform their functions in a manner that is consistent with regulatory requirements, NOAA's environmental policies and NOAA's overall mission.

3. FUNCTIONS. The Work Group shall undertake the appropriate steps to develop an CIMS/P2 program; such steps may include:

- Assist in the development of systems that facilitate compliance with regulations governing the use and handling of hazardous materials
- Promote P2 efforts for NOAA facilities and operations
- Ensure that the issues and needs of the various members' line offices are addressed during the development and implementation policies and procedures
- Facilitate the transfer of information between headquarters and the facilities
- Promote the CIMS Initiative through strategic and budgetary planning

4. COMPOSITION. The Team will be lead by a Chairperson, appointed by the Chief for the NOAA Environmental Compliance and Safety Staff. The Chief shall also designate a Vice Chairperson and Advisor. The Work Group voting membership will consist of a mix of NOAA employees including the Work Group Chairperson, Vice Chairperson and Advisor; and line and staff offices representatives. Other interested parties (e.g. contractors) may contribute as non-voting members, but shall not participate in government inherent functions and activities (policy development, budget development, procurement cost estimating, etc.).

5. MEETINGS. The Team will meet at least twice during a fiscal year. The Chairperson or a designated government employee "interim chairperson" shall be present at all times during the meetings, and shall be authorized to close meetings to non-governmental personnel whenever there are government inherent issues to be discussed.

6. DURATION. The Team is authorized for an initial two year period (starting October 1, 1998). The Team may be renewed beyond this period subject to authorization from the Chief, NOAA Environmental Compliance and Safety Staff.

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Chief, NOAA Environmental Compliance & Safety Approval Date

Chairperson
Susan Kennedy

Vice Chairperson
Lynnette Ansell

Advisor
I. Sam Higuchi, Jr.

Voting Members
Judy Masura
Barbara Jobe
David Ulrich
Nir Barnea
Kristin Kniskern
Kim Kulpanowski
Donna Marino

Non-Voting Participants

Deborah Albert (Tetra Tech EM Inc.)
Yelena Platt (EG&G)

4.0 TEAM'S MULTIYEAR (1999 - 2006) PLAN OF ACTION & MILESTONES

TABLE 4
MULTIYEAR (1999-2006) PLAN OF ACTION & MILESTONES:
CIMS AND P2 PROGRAM TEAM

GOAL 1: RESTORE CONTAMINATED PROPERTIES

OBJECTIVE 1.1 Identify Scope of Contamination: Complete identification and characterization of contaminated properties using Cleanup and Restore the Environment (CARE) assessments.

ACTIVITY: Develop business methods and procedures for recording past and current facility hazardous materials activities.

STRATEGIC PLANNING WORKSHOP'S MULTIYEAR OUTCOMES	PERFORMANCE MEASURES	ACTIONS	YEAR
A. By 2000, track current spills in CIMS.	100 percent of NOAA applicable facilities/operations in CIMS or a comparable method of tracking information	1. Amend and distribute NAO to facilities. 2. Assist audit team with preparing procedures for documenting historic spills/contamination.	2000
B. By 2002, baseline current hazardous materials usage. (See Goal 2, Activity for Objective 2.1)	100 percent of NOAA applicable facilities/operations in CIMS or a comparable method of tracking information	None identified.	2002

GOAL 2: ENSURE ENVIRONMENTAL COMPLIANCE AND P2

OBJECTIVE 2.1 Identify Scope of P2 Problems: Identify chemicals and current environmental compliance, and health and safety issues using NOAA's CIMS and using audit protocols.

ACTIVITY: Baseline chemical usage at NOAA operations.

A. By 2000, have 30 percent of NOAA operations' inventories in CIMS.	Reduction in hazardous waste generation	1. Determine number of NOAA-owned facilities 2. Determine number of acres and locations of facilities 3. Define terms - facility, installation	

		4. Determine which NOAA-owned/operated facilities use hazardous materials/generate hazardous waste and define usage.	
B. By 2001, have 50 percent of NOAA operations' inventories in CIMS.	Reduction in hazardous waste generation	None identified.	
C. By 2002, have 100 percent of NOAA operations' inventories in CIMS.	Reduction in hazardous waste generation	None identified.	
D. By 2003, analyze baseline data (determine types and amounts of chemicals being used at NOAA's facilities [results to be used for Objective 2.2 activity]).	Reduction in hazardous waste generation	None identified.	
OBJECTIVE 2.2 Correct Pollution Problems: Correct compliance issues on a project list priority basis using EPA's project prioritization factors. **ACTIVITY:** Develop strategy for systematically reducing chemical usage and waste generation at NOAA facilities.			
A. See Objective 3.2, multi-year outcomes B., C., D., and E.	Reduction in hazardous waste generation	None identified.	NA
OBJECTIVE 2.3 Prevent Pollution Problems: Apply P2 approaches to reduce the quantity and toxicity of wastes generated and pollutants released by NOAA's operations. **ACTIVITY:** Develop strategy for systematically reducing chemical usage, energy consumption, and waste generation related to NOAA operations.			
A. By 1999, in compliance with EO 12843, assess strategy and develop a written plan for reducing the use of ozone depleting substances (ODS) throughout NOAA, and modify procurement specifications to substitute non-ozone depleting substance for ODS.	NOAA is ODS free by 2005.	1. Estimate (a) all facilities and units using ODS, (b) appropriate substitutes, and (c) a schedule for implementation.	1999
B. By 1999, in compliance with EO 12856, develop measures and reduce NOAA's total releases and transfers of EPCRA Section 313 toxic chemicals by 50 percent.	Reduction in hazardous waste generation.	1. Have affected facilities review the policy and corresponding guidance document and provide input on the ease of implementing the measures.	1999

313 toxic chemicals by 50 percent.		2. Request copies of 1994 and 1999 Section 313 (Form R) reports from affected facilities and determine whether the reduction goal was met.	
C. By 1999, develop a written NOAA-wide P2 strategy consistent with the Department of Commerce's strategy to comply with the requirements as specified in Sections 302 through 305 of Executive Order 12856.	Reduction in hazardous waste generation.	1. Ensure that the strategy includes a policy statement designating principal responsibilities for development, implementation, and evaluation of the strategy. The statement shall reflect the agency's commitment to incorporate P2 through source reduction in facility management and acquisition.	1999
D. By January 1, 1999, (due date of September 14, 1998 has been exceeded) in compliance with EO 13101, establish baseline and goals for solid waste prevention and recycling and establish methods for documenting solid waste generation and recycling rates at each facility.	Reduce solid waste generation.	1. Provide tools for ASCs on items that could be replaced with environmentally preferable products. 2. Incorporate compliance with EO 13101 into all contracting language. (Establish procedures and policies for purchasing environmentally preferable products.) 3. Develop boilerplate contracting language to be used in all agency contracts. Include incentives for compliance and disincentives for noncompliance. 4. Purchase copier, printing, and writing paper with 30 percent post consumer content by December 31, 1998. 5. Get current policy statement (from Roy McCullough), revise as needed, and publish. 6. Through a data call, determine cost savings (cost/benefit analysis).	1999
E. By 1999, develop and distribute NOAA policy statement on sustainable development.	Reduce construction related waste generation.	None identified.	1999

F. By 2000, all NOAA new construction and modernization activities will follow the sustainable development policy.	Reduce construction related waste generation.	None identified.	2000
G. By 2000, develop guidance documents for facilities on NOAA's P2 strategy.	Reduction in hazardous waste generation.	None identified.	2000
H. By 2000, create NOAA policy on energy audit sub-program.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA owned facilities (adjusted for inflation).	1. Add energy conservation information to ECS web page. 2. Send a letter to facilities from OFA or NOAA telling them what to do and the availability of NOAA/ECS assistance.	2000
I. By 2000, implement the Section 313 sub program.	Reduction in hazardous waste generation	None identified.	2000
J. By 2000, develop energy conservation chart for quarterly review (develop mid-year).	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA owned facilities (adjusted for inflation).	None identified.	2000
K. By 2001, 50 percent of NOAA-owned square footage will have undergone an energy efficient audit and prepared a strategy for replacing equipment with energy efficient units.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA owned facilities (adjusted for inflation).	None identified.	2001
L. By 2001, each NOAA facility subject to EPCRA reporting requirements shall develop a local P2 team and conduct a pollution prevention opportunity assessment (P2OA) to identify opportunities for pollution prevention. *The P2 teams will continually identify opportunities for P2.*	Reduction in hazardous waste generation.	1. Increase recycling by 50 percent agency-wide. 2. Set long range goals for 2005 and 2010. 3. Designate a recyclingcoordinator for each facility. 4. Recycle 100 percent of all wooden pallets, toner cartridges, flourescent lamp ballasts, and batteries.	2001
M By 2001, create water efficiency audit sub-program.	Reduce water consumption.	None identified.	2001
N. By 2002, in compliance with EO 12856, each NOAA facility subject to EPCRA reporting	Reduction in hazardous waste generation.	1. Audit facilities in 2002 to ensure all P2OA were conducted.	2002

requirements shall develop a P2 plan.		2. Review P2 plans for completeness. 3. Include waste generation data for a baseline year (no later than 1994) and specific plans for reducing the amount of waste generated in future year from the amounts generated during the baseline year. 4. Submit to headquarter for review.	
O. By 2002, implement the recommendations of the energy audit.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA owned facilities (adjusted for inflation).	1. Determine fleet size 2. Set goals for new vehicle purchases	2002
P. By 2002, implement water reduction sub-program at 5 percent of NOAA's facilities.	Reduce water consumption.	1. Equip existing computer equipment with an energy-efficient, low-power, stand-by feature.	2002
Q. By 2003, implement water reduction sub-program at 10 percent of NOAA's facilities.	Reduce water consumption.	None identified.	2003
R. By 2003, develop a plan for reducing or eliminating extremely hazardous substances (EHS).	Reduction in hazardous waste generation.	1. Query CIMS to determine amounts of EHSs reduced. Ensure reduction amounts correspond to amounts specified in plan. 2. Include a baseline indicating the amount (in pounds) of EHSs purchased by NOAA in 2000. 3. Include appropriate substitutes for EHSs or discuss alternatives that would not require the use of such materials.	2003
S. By 2003, develop method for and track energy savings.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA owned facilities (adjusted for inflation).	None identified.	2003
T. By 2004, implement water reduction sub-program at 20 percent of NOAA's facilities.	Reduce water consumption.	None identified.	2004

U. By 2004, 75 percent of NOAA's operations are ODS free.	Make NOAA 100 percent ODS-free.	None identified.	2004
V. By 2004, implement the EHS sub-program.	Reduction in hazardous waste generation.	None identified.	2004
W By 2005, implement water reduction sub-program at 30 percent of NOAA's facilities.	Reduce water consumption.	None identified.	2005
X. By 2005, 100 percent of NOAA-owned square footage will have undergone an energy efficient audit and prepared a strategy for replacing equipment with energy efficient units.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA-owned facilities (adjusted for inflation).	None identified.	2005
Y. By 2005, in compliance with EO 12902, reduce overall energy and water use in all buildings by 30 percent by significantly increasing the use of solar and other renewable energy sources.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA-owned facilities (adjusted for inflation).	None identified.	2005
Z. By 2005, in compliance with EO 12844, procure and use alternatively fueled vehicles where possible to reduce toxic and hazardous air pollutants (prioritizing for non-attainment areas).	Reduction in hazardous waste generation.	None identified.	2005
AA By 2005, in compliance with EO 12845, ensure that all computer equipment purchased meets the EPA "Energy Star" energy efficiency requirements.	Achieve a $1 to $2 per square foot rate for energy consumption at all NOAA-owned facilities (adjusted for inflation).	None identified.	2005
BB. By 2005, NOAA is 100 percent ODS free.	Make NOAA 100 percent ODS-free.	None identified.	2005
CC. By 2005, implement the EHS sub-program.	Reduction in hazardous waste generation.	None identified.	2005

GOAL 3: SUSTAIN ENVIRONMENTAL COMPLIANCE THROUGH ENVIRONMENTAL MANAGEMENT SYSTEMS - CODE OF ENVIRONMENTAL MANAGEMENT PRINCIPLES

OBJECTIVE 3.2 Compliance Assurance and Pollution Prevention: NOAA and its Line/Staff offices and facilities implement proactive programs that aggressively identify and address potential compliance problem areas and utilize P2 approaches to correct deficiencies and improve environmental performance.

ACTIVITY 3.2.1. Compliance Assurance: NOAA will implement the strategies created to ensure protection of the environment

and worker safety.

ACTIVITY 3.2.2. Emergency Preparedness: NOAA and its line and staff offices and their facilities develop and implement programs to address contingency planning and emergency response situations.

ACTIVITY 3.2.3. P2 and Resource Conservation: NOAA and its line and staff offices and their facilities develop anddevelop programs to address P2 and resource conservation.

A. By 1999, implement PEHS/receive approval of the PEHS process.	1. Reduction in hazardous waste generation. 2. No Notices of Violation (NOV) 3. Reduction in repeat audit findings (internal audits) 4. Reduction in the generation of solid waste - reduce disposal due to exceeded shelf-life/bottle-open dates, abandoned containers, and unneeded stocks	1. Revise PEHS Review process to include (a) job hazard analysis (JHA), and (b) language about current project reviews. 2. Develop training on PEHS Review process - different levels of training for different job responsibilities 3. Obtain Dr. Baker' s and line offices' acceptance of the PEHS review process. 4. Roll play to determine employee knowledge of the process.	1999
B. By 2002, perform PEHS review of 30 percent of current activities.	Reduction in hazardous waste generation.	None identified.	2002
C. By 2003, perform PEHS review of 60 percent of current activities.	Reduction in hazardouswaste generation.	None identified.	2003
D. By 2004, perform PEHS review of 80 percent of current activities.	Reduction in hazardous waste generation.	None identified.	2004
E. By 2005, perform PEHS review of 100 percent of current activities.	Reduction in hazardous waste generation.	None identified.	2005
F. One year after the development of a sub-process, incorporate it into PEHS.	Reduction in hazardous waste generation.	None identified.	NA
G. Annually, NOAA will review the effectiveness of the PEHS process and all of the sub processes.	Reduction in hazardous waste generation.	1. Include feedback in decision making process.	NA

OBJECTIVE 3.3 Enabling systems: NOAA and its line and staff offices and their facilities develop and implement the necessary measures to enable personnel to perform their functions in a manner that is consistent with regulatory requirements, NOAA's

environmental policies and NOAA's overall mission.

ACTIVITY 3.3.1. CIMS/P2: NOAA and its line and staff offices and their facilities ensure that personnel understand and implement procedures where their actions effect the environment and health and safety.

ACTIVITY 3.3.2. Structural Supports: NOAA shall ensure that personnel understand and implement procedures where the actions of their employees affect human health or the environment.

ACTIVITY 3.3.3. Information Management, Communication, and Documentation: NOAA and its line and staff offices and their facilities develop and implement systems that encourage effective management of environmentally-related information, communication, and documentation.

A. By 1999, develop and implement a communication strategy.	All goals.	1. Create a national and ASC Web pages and establish a feedback mechanism. 2. Host conferences. 3. Prepare news articles and newsletters.	1999
B. By 1999, develop version 1.0 of CIMS	Reduction in hazardous waste generation.	None identified.	1999
C. By 2000, evaluate Communication Strategy.	All goals.	None identified.	2000
D. By 2000, create standard policies for implementation related to the management of chemicals.	Reduction in hazardous waste generation.	1. Develop tools to aid in the implementation of the policy (complete development of Version 1.0 of an electronic system for tracking hazardous material inventories) 2. Develop best management practices (BMP) to achieve P2 and waste minimization.	2000
E. By 2000, implement CIMS help line.	Reduction in hazardous waste generation.	None identified.	2000
F. By 2001, refine system (Version 2.0), and implement Version 1.0 of the system nationwide.	Reduction in hazardous waste generation.	None identified.	2001
G. By 2002, make final refinements to the system (Version 3.0).	Reduction in hazardous waste generation.	None identified.	2002

TABLE 5
FY 2001 BUDGET SUBMITTAL - OUTYEARS: CIMS AND P2 PROGRAM TEAM

BUDGET ITEMS	FY 1998 BASE	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
Personnel Salaries (include benefits)									
Travel									
Work Group									
Technical Representative									
Misc.									
Transportation of Things									
Communications									
Printing									
Supplies &Materials									
Equipment									
Contractual Source Services									
Acquisitions of Assets									
TOTAL COSTS									
TOTAL NUMBER OF FTEs									

5.0 FISCAL YEAR 2001 BUDGET SUBMITTAL PLAN OF ACTION & MILESTONES

TABLE 6
FISCAL YEAR 2001 BUDGET SUBMITTAL PLAN OF ACTION & MILESTONES:
CIMS AND P2 PROGRAM TEAM

OBJECTIVE 3.3 Enabling systems: NOAA and its line and staff offices and their facilities develop and implement the necessary measures to enable personnel to perform their functions in a manner that is consistent with regulatory requirements, NOAA's environmental policies and NOAA's overall mission.

ACTIVITY 3.3.1.

STRATEGIC PLANNING WORKSHOP'S MULTIYEAR OUTCOMES	PERFORMANCE MEASURES	PLANNED ACTIONS	YEAR

TABLE 7
FY 2001 BUDGET SUBMITTAL: CIMS AND P2 PROGRAM TEAM

BUDGET ITEMS	BASE-10%	BASE -5%	BASE (1998)	BASE+5%	BASE+10%	IDEAL
Personnel Salaries, $						
Travel, $						
Work Group						
Technical Representative						
Misc., $						
Transportation of Things						
Communications						
Printing						
Supplies & Materials						
Equipment						
Contractual Source Services, $						
Major Acquisitions, $						
TOTAL COSTS						
TOTAL FTEs						
Impact on GPRA Outcome Goals						

6.0 FISCAL YEAR 1999 ANNUAL PLAN OF ACTION & MILESTONES

TABLE 8
FISCAL YEAR 1999 BUDGET SUBMITTAL PLAN OF ACTION & MILESTONES:
CIMS AND P2 PROGRAM TEAM

OBJECTIVE 3.3 Enabling systems: NOAA and its line and staff offices and their facilities develop and implement the necessary measures to enable personnel to perform their functions in a manner that is consistent with regulatory requirements, NOAA's environmental policies and NOAA's overall mission.

ACTIVITY 3.3.1.

STRATEGIC PLANNING WORKSHOP'S MULTIYEAR OUTCOMES	PERFORMANCE MEASURES	PLANNED ACTIONS	YEAR

7.0 FISCAL YEAR 1999 ANNUAL TEAM PERFORMANCE REPORT

TABLE 9
FISCAL YEAR 1999 ANNUAL TEAM PERFORMANCE REPORT:
CIMS AND P2 PROGRAM TEAM

OBJECTIVE 3.3 Enabling systems: NOAA and its line and staff offices and their facilities develop and implement the necessary measures to enable personnel to perform their functions in a manner that is consistent with regulatory requirements, NOAA's environmental policies and NOAA's overall mission.

ACTIVITY 3.3.1.

STRATEGIC PLANNING WORKSHOP'S MULTIYEAR OUTCOMES	PERFORMANCE MEASURES	FY 1996 RESULTS	FY 1997 RESULTS	FY 1998 RESULTS	FY 1999 RESULTS	FY 1999 PLANNED RESULTS

TAB B
WORKSHEETS

CIMS AND P2 PROGRAM TEAM

I. ACTIVITY:

II. PRESENT SITUATION:

III. STRATEGIC PLANNING WORKSHOP'S OUTCOME:

IV. THREE ALTERNATIVES (3 plans of action, including no action plan, with advantages and disadvantages)

A. DESCRIPTION

1) No Action Alternative:

2) Alternative #1:

3) Alternative #2:

B. DETAILED FINANCIAL & COST ANALYSIS (from H. P. Hatry, K. P. Voytek & A. E. Holmes, 1989, Building Innovation Into Program Reviews: Analysis of Service Delivery Alternatives):

CRITERION	NO ACTION	ALTERNATIVE #1	ALTERNATIVE #2	COMMENTS
1. Direct personnel costs				
2. Direct fringe costs				
3. Other direct Operating Costs				
4. Equipment & Facility costs				
5. Indirect overhead, Contract price				
6. Administration and monitoring costs				
7. Transition costs, Transition costs				
8. Allowance for cost overruns				
TOTAL				

C. ANALYSIS (from H. P. Hatry, K. P. Voytek & A. E. Holmes, 1989, Building Innovation Into Program Reviews: Analysis of Service Delivery Alternatives):

CRITERION	NO ACTION	ALTERNATIVE #1	ALTERNATIVE #2	COMMENTS
1. FINANCIAL & COST SUMMARY: *Use quantitative estimates. If none use qualitative: 1= much higher than current mode, 2= somewhat higher, 3= about the same, 4= some what lower, 5= much lower, N/A= not applicable, DK= don't know*				
a. TOTAL COST: Direct personnel costs, Direct fringe costs, Other direct Operating Costs, Equipment & Facility costs, Indirect overhead, Contract price, Administration and monitoring costs, Transition costs, Transition costs, Allowance for cost overruns				
b. Reimbursable Costs				
c. Number of Employees Required for Implementation				
2. SERVICE QUALITY & EFFECTIVENESS: *Use quantitative estimates. If none use qualitative: 1= much better than current mode, 2=somewhat better, 3= about the same, 4= somewhat worse, 5= much worse, N/A= not applicable, DK= don't know*				
a. Key Performance Measures				
b. Timeliness				
c. Equity				
d. Staying Power				
e. Customer Choice				
f. Cost to Citizens				
g. Privacy				
3. FEASIBILITY: *Use quantitative estimates. If none use qualitative: 1= Could be a major problem, 2= moderate problem, 3= minor problem, 4= no problem, N/A= not applicable, DK= don't know*				
a. Procurement & Personnel Regulations				
b. Federal Regulations				
c. Agency Reaction				
d. Executive Office Reaction				
e. Legislative Reaction				
f. Public Reaction				
g. Personnel Dislocation				
h. Political Consequences				
i. Personnel Availability				
j. Deliverer Availability				
k. Need for New Facilities				

l. Manager Frustration				
m. Employee Satisfaction				
n. Competitive Environment				
o. Experience in Monitoring				
p. Interrelationships				
q. Workload Fluctuations				
r. Any recent Crises?				

V. RECOMMENDED ALTERNATIVE:

VI. NEXT STEPS:

CIMS AND P2 PROGRAM TEAM

I. ACTIVITY:

II. PRESENT SITUATION:

III. STRATEGIC PLANNING WORKSHOP'S OUTCOME:

IV. THREE ALTERNATIVES (3 plans of action, including no action plan, with advantages and disadvantages)

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V. RECOMMENDED ALTERNATIVE:

VI. NEXT STEPS:

CIMS AND P2 PROGRAM TEAM

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V. RECOMMENDED ALTERNATIVE:

VI. NEXT STEPS:

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o. Experience in Monitoring				
p. Interrelationships				
q. Workload Fluctuations				
r. Any recent Crises?				

V. RECOMMENDED ALTERNATIVE:

VI. NEXT STEPS:

CIMS AND P2 PROGRAM TEAM

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m. Employee Satisfaction				
n. Competitive Environment				
o. Experience in Monitoring				
p. Interrelationships				
q. Workload Fluctuations				
r. Any recent Crises?				

V. RECOMMENDED ALTERNATIVE:

VI. NEXT STEPS:

TEAM'S DETAILED PLAN OF ACTION & MILESTONES

ACTION ITEMS	PRIORITY	WHO	SCHEDULE		EXPECTED OUTCOMES	MEASURES	RESOURCES NEEDED	STATUS	COMMENTS
			PLAN	ACTUAL					

[ISSUE PAPER FORMAT]

SUBJECT: CIMS AND P2 PROGRAM TEAM

I. ACTIVITY:

II. PROBLEM OR ISSUE (up to 2 sentences):

III. BACKGROUND & CURRENT SITUATION (up to 5 sentences):

IV. DISCUSSION OF ALTERNATIVES (up to 3 paragraphs with bullet format):

V. ANALYSIS OF ALTERNATIVES:

CRITERION	NO ACTION	ALTERNATIVE #1	ALTERNATIVE #2	COMMENTS
Description of Alternative				
Advantages				
Disadvantages				
Total Cost				
Number of Employees Required for Implementation				
Milestones				
Performance Measures				

VI. RECOMMENDATION (1 sentence):

VII. TEAM'S ACTION (approve or disapprove):

TAB C

CIMS-P2 GUIDANCE DOCUMENTS

EXECUTIVE ORDER 12780

FEDERAL AGENCY RECYCLING AND THE COUNCIL ON FEDERAL RECYCLING AND PROCUREMENT POLICY

October 31, 1991

WHEREAS, this Ad ministration is determined to secure for future generations of Americans their rightful share of our Nation's natural resources, as well as a clean and healthful environment in which to enjoy them; and

WHEREAS, two goals of this Administration's environm ental policy, cost - effective pollution prevention and the conservation of natural resources, can be significantly advanced by reducing waste and recycling the resources used by this generation of Americans; and

WHEREAS, the Federal Government, as one of the Nation's largest generators of solid waste, is able through cost-effective waste reduction and recycling resources to conserve local government disposal capacity; and

WHEREAS, the Federal Government, as the Nation's largest single consumer, is able through affirmative procurement practices to encourage the development of economically efficient markets for products manufactured with recycled
materials;

NOW, THEREFORE, I, GEORGE BUSH, by the authority vested in me as President by the Constitution and the laws of the United States of America, including the Solid Waste Disposal Act, Public Law 89-272, 79 Stat. 997, as amended by the Resource Conservation and Recovery Act ("RCRA"), Public Law 94 -580, 90 Stat. 2795 (1976), hereby order as follows:

PART 1 -- PREAMBLE

Section 101. The purpose of this Executive order is to:

(a) Require that Federal agencies promote cost -effective waste reduction and recycling of reusable materials from wastes generated by Federal Government activities.

(b) Encourage econ omically efficient market demand for designated items produced using recovered materials by directing the immediate implementation of cost -effective Federal procurement preference programs favoring the purchase of such items.

(c) Provide a forum for the development and study of policy options and procurement practices that will promote environmentally sound and economically efficient waste reduction and recycling of our Nation's resources.

(d) Integrate cost -effective waste reduction and recycling pro grams into all Federal agency waste management programs in order to assist in addressing the Nation's solid waste disposal problems.

(e) Establish Federal Government leadership in addressing the need for efficient State and local solid waste management through implementation of environmentally sound and economically efficient recycling.

Sec. 102. Consistent with section 6002(c)(1) of RCRA (42 U.S.C. 6962(c)(1)), activities and operations of the executive branch shall be conducted in an environmentally responsible manner, and waste reduction and recycling
opportunities shall be utilized to the maximum extent practicable, consistent with economic

efficiency.

Sec. 103. Consistent with section 6002(c)(2) of RCRA (42 U.S.C. 6962(c)(2)), agencies that generate energy from fossil fuel in systems that have the technical capacity of using energy or fuels derived from solid waste as a primary or supplementary fuel shall use such capability to the maximum extent practicable.

PART 2 -- DEFINITIONS

For purposes of this order:

Sec. 201. "Federal agency" means any department, agency, or other instrumentality of the executive branch.

Sec. 202. "Procurement" and "acquisition" are used interchangeably to refer to the processes through which Federal agencies purchase products.

Sec. 203. "Recovered materials" is used as defined in section 1004(19) and 6002(h) of the Resource Conservation and Recovery Act (42 U.S.C. 6903(19) and 6962(h)), as amended.

Sec. 204. "Recycling" means the diversion of materials from the solid waste stream and the beneficial use of such materials. Recycling is further defined as the result of a series of activities by which materials that would become or otherwise remain waste, are diverted from the solid waste stream by collection, s eparation and processing and are used as raw materials in the manufacture of goods sold or distributed in commerce or the reuse of such materials as substitutes for goods made of virgin materials.

Sec. 205. "Waste reduction" means any change in a proces s, operation, or activity that results in the economically efficient reduction in waste material
per unit of production without reducing the value output of the process, operation, or activity, taking into account the health and environmental consequences of such change.

PART 3 -- SOLID WASTE RECYCLING PROGRAMS

Sec. 301. Recycling Programs. Each Federal agency that has not already done so shall initiate a program to promote cost -effective waste reduction and recycling of reusable materials in all of its operations and facilities. These programs shall foster (a) practices that reduce waste generation, and (b) the recycling of recyclable materials such as paper, plastic, metals, glass, used oil, lead acid batteries, and tires and the composting of organic m aterials such as yard waste. The recycling programs implemented pursuant to this section must be compatible with applicable State and local recycling requirements.

Sec. 302. Contractor Operated Facilities. Every contract that provides for contractor ope ration of a Government -owned or leased facility, awarded more than 210 days after the effective date of this Executive order, shall include
provisions that obligate the contractor to comply with the requirements of this Part as fully as though the contract or were a Federal agency.

PART 4 -- VOLUNTARY STANDARDS

Sec. 401. Amendment of OMB Circular No. A -119. The Director of the Office of Management and Budget ("OMB") shall amend, as appropriate, OMB Circular No. A -119, "Federal Participation in the Development and Use of Voluntary Standards," to encourage Federal agencies to participate in the development of environmentally sound and economically efficient standards and to encourage Federal agency use of such standards.

PART 5 -- PROCUREMENT OF RECOVERED MA TERIALS

Sec. 501. Adoption of Affirmative Procurement Programs. Within 180 days after the effective date of this order, each Federal agency shall provide a report to the Administrator of the Environmental Protection Agency regarding the Agency's adoptio n of an affirmative procurement program; such programs are required by
section 6002(i) of RCRA (42 U.S.C. 6962(i)). Within 1 year of the issuance of this order, the Administrator of the Environmental Protection Agency shall report to the President regardin g the compliance of each Federal agency with this requirement.

Sec. 502. Annual Review of Affirmative Procurement Programs. In accordance with section 6002(i) of RCRA (42 U.S.C. 6962(i)), each Federal agency shall review annually the effectiveness of its affirmative procurement program and shall provide a report regarding its findings to the Environmental Protection Agency and to the Office of Federal Procurement Policy, beginning with a report covering fiscal year 1992. Such report shall be transmitte d by December 15 each year. Reports required by this section shall be made available to the public.

PART 6 -- RECYCLING COORDINATORS AND THE COUNCIL ON FEDERAL RECYCLING AND PROCUREMENT POLICY

Sec. 601. Federal Recycling Coordinator. Within 90 days after the effective date of this order, the Administrator of the Environmental Protection Agency shall designate a senior official of that Agency to serve as the Federal
Recycling Coordinator. The Federal Recycling Coordinator shall review and report annually to OMB, at the time of agency budget submissions, the actions taken by the agencies to comply with the requirements of this order.

Sec. 602. Designation of Recycling Coordinators. Within 90 days after the effective date of this order, the head of each Fe deral agency shall designate an agency employee to serve as Agency Recycling Coordinator. The Agency
Recycling Coordinator shall be responsible for:

(a) coordinating the development of an effective agency waste reduction and recycling program that compl ies with the comprehensive implementation plan developed by the Council on Federal Recycling and Procurement Policy;

(b) coordinating agency action to develop benefits, costs, and savings data measuring the effectiveness of the agency program; and

(c) coordinating the development of agency reports required by this Executive order and providing copies of such reports to the Environmental Protection Agency.

Sec. 603. The Council on Federal Recycling and Procurement Policy.

(a) A Council on Federal Recycling and Procurement Policy is hereby established. It shall comprise the Federal Recycling Coordinator, the Chairman of the Council on Environmental Quality, the Administrator of the Office of Federal Procurement Policy, and the Agency Recycling Coordinator and the Procurement Executive of each of the following agencies: the Environmental Protection Agency, the Department of Defense, the General Services Administration, the National Aeronautics and Space Administration, the Department of Energy, the Department of Commerce, and the Department of the Interior. The Federal
Recycling Coordinator shall serve as Chair of the Council.

(b) Duties. The Council on Federal Recycling and Procurement Policy shall:

(1) identify and recommend, to OMB, initiatives that will promote the purposes of this order, including:

(A) the development of appropriate incentives to encourage the economically efficient acquisition by the Federal Government of products that reduce waste and of products produced with recycled materials;

(B) the development of appropriate incentives to encourage active participation in economically efficient Federal waste reduction and recycling programs; and

(C) the development of guidelines for cost-effective waste reduction and recycling activities by Federal agencies;

(2) review Federal agency specifications and standards and recommend changes that will enhance Federal procurement of products made from recycled and recyclable materials, taking into account the costs and the performance requirements of each agency:

(3) collect and disseminate Federal agencies' information concerning methods to reduce wastes, types of materials that can be recycled, the costs and savings associated with recycling, and the current market sources and prices of products that reduce waste and of products produced with recycled materials;

(4) assist the development of cost-effective waste reduction and recycling programs pursuant to this order by developing guidelines for agency waste reduction and recycling programs and by identifying long-range goals for
Federal waste reduction and recycling programs;

(5) provide meaningful data to measure the effectiveness and progress of Federal waste reduction and recycling programs;

(6) provide guidance and assistance to the Agency Recycling Coordinators in setting up and reporting on agency programs; and

(7) review Federal agency compliance with section 103 of this order.

PART 7--LIMITATION

Sec. 701. This order is intended only to improve the internal management of the executive branch and shall not be interpreted to create any right or benefit, substantive or procedural, enforceable at law by a party against the
United States, its officers, or any other person.

Sec. 702. Section 502 and Part 6 of this order shall be effective for 5 years only, beginning on the effective date of this order.

Sec. 703. This order shall be effective immediately.

GEORGE BUSH
THE W HITE HOUSE,
October 31, 1991.

EXECUTIVE ORDER 12843

PROCUREMENT REQUIREMENTS AND POLICIES FOR FEDERAL AGENCIES FOR OZONE-DEPLETING SUBSTANCES

HISTORY: April 21, 1993

WHEREAS, the essential function of th e stratospheric ozone layer is shielding the Earth from dangerous ultraviolet radiation; and

WHEREAS, the production and consumption of substances that cause the depletion of stratospheric ozone are being rapidly phased out on a worldwide basis with the support and encouragement of the United States; and

WHEREAS, the Montreal Protocol on Substances that Deplete the Ozone Layer, to which the United States is a signatory, calls for a phaseout of the production and consumption of these subs tances; and

WHEREAS, the Federal Government, as one of the principal users of these substances, is able through affirmative procurement practices to reduce significantly the use of these substances and to provide leadership in their phaseout; and

WHEREAS, the use of alternative substances and new technologies to replace these ozone -depleting substances may contribute positively to the economic competitiveness on the world market of U.S. manufacturers of these innovative safe alternatives ;

NOW, THEREFORE, I, WILLIAM JEFFERSON CLINTON, by the authority vested in me as President by the Constitution and the laws of the United States of America, including the 1990 amendments to the Clean Air Act ("Clean Air Act Amendments"), Public Law 10 1-549, and in order to reduce the Federal Government's procurement and use of substances that cause stratospheric ozone depletion, do hereby order as follows:

Section 1. Federal Agencies. Federal agencies shall, to the extent practicable:

(a) conform their procurement regulations and practices to the policies and requirements of Title VI of the Clean Air Act Amendments, which deal with stratospheric ozone protection;

(b) maximize the use of safe alternatives to ozone -depleting substances;

(c) evaluate the present and future uses of ozone -depleting substances, including making assessments of existing and future needs for such materials and evaluate their use of and plans for recycling;

(d) revise their procurement practices and implement cost-effective programs both to modify specifications and contracts that require the use of ozone -depleting substances and to substitute non-ozone-depleting substances to the extent economically practicable; and

(e) exercise leadership, develop exemp lary practices, and disseminate information on successful efforts in phasing out ozone -depleting substances.

Sec. 2. Definitions. (a) "Federal agency" means any executive department, military department, or independent agency within the meaning of 5 U.S. C. 101, 102, or 104(1), respectively.

(b) "Procurement" and "acquisition" are used interchangeably to refer to the processes through which Federal agencies purchase products and services.

(c) "Procurement regulations, policies and procedures" enco mpasses the complete acquisition process, including the generation of product descriptions by individuals responsible for determining which substances must be acquired by the agency to meet its mission.

(d) "Ozone -depleting substances" means the substances controlled internationally under the Montreal Protocol and nationally under Title VI of the Clean Air Act Amendments. This includes both Class I and Class II substances as follows:

(i) "Class I substance" means any substance designated as Clas s I in the Federal Register notice of July 30, 1992 (57 Fed. Reg. 33753), including chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform and any other substance so designated by the Environmental Protection Agency ("EPA") by regulation at a later date; and

(ii) "Class II substance" means any substance designated as Class II in the Federal Register notice of July 30, 1992 (57 Fed. Reg. 33753), including hydrochlorofluorocarbons and any other substances so designated by EPA by regulat ion at a later date.

(e) "Recycling" is used to encompass recovery and reclamation, as well as the reuse of controlled substances.

Sec. 3. Policy. It is the policy of the Federal Government that Federal agencies: (i) implement cost-effective program s to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and (ii) give preference to the procurement of alternative chemicals, products, and manufacturing processes that reduce overall risks to huma n health and the environment by lessening the depletion of ozone in the upper atmosphere. In implementing this policy, prior to final promulgation of EPA regulations on Federal procurement, Federal agencies shall begin conforming their

procurement policies to the general requirements of Title VI of the Clean Air Act Amendments by:

(a) minimizing, where economically practicable, the procurement of products containing or manufactured with Class I substances in anticipation of the phaseout schedule to be promulgated by EPA for Class I substances, and maximizing the use of safe alternatives. In developing their procurement policies, agencies should be aware of the phaseout schedule for Class II substances;

(b) amending existing contracts, to the extent permitted by law and where practicable, to be consistent with the phaseout schedules for Class I substances. In awarding contracts, agencies should be aware of the phaseout schedule for Class II substances in awarding contracts;

(c) implementing policies and practices that recognize the increasingly limited availability of Class I substances as production levels capped by the Montreal Protocol decline until final phaseout. Such practices shall include, but are not limited to:

(i) reducing emissions and recycling ozone-depleting substances;

(ii) ceasing the purchase of nonessential products containing or manufactured with ozone-depleting substances; and

(iii) requiring that new contracts provide that any acquired products containing or manufactured with Class I or Class II substances be labeled in accordance with section 611 of the Clean Air Act Amendments.

Sec. 4. Responsibilities. Not later than 6 months after the effective date of this Executive order, each Federal agency, where feasible, shall have in place practices that, where economically practicable, minimize the procurement of Class I substances. Agencies also shall be aware of the phaseout schedule for Class II substances. Agency practices may include, but are not limited to:

(a) altering existing equipment and/or procedures to make use of safe alternatives;

(b) specifying the use of safe alternatives and of goods and services, where available, that do not require the use of Class I substances in new procurements and that limit the use of Class II substances consistent with section 612 of the Clean Air Act Amendments; and

(c) amending existing contracts, to the extent permitted by law and where practicable, to require the use of safe alternatives.

Sec. 5. Reporting Requirements. Not later than 6 months after the effective date of this Executive order, each Federal agency shall submit to the Office of Management and Budget a report regarding the implementation of this order. The report shall include a certification by each agency that its regulations and procurement practices are being amended to comply with this order.

Sec. 6. Exceptions. Exceptions to compliance with this Executive order may be made in accordance with section 604 of the Clean Air Act Amendments and with the provisions of the Montreal Protocol.

Sec. 7. Effective Date. This Executive order is effective 30 days after the date of issuance. Although full implementation of this order must await revisions to the Federal Acquisition Regulations ("FAR"), it is

expected that Federal agencies will take all appropriate actions in the interim to implement those aspects of the order that are not dependent upon regulatory revision.

Sec. 8. Federal Acquisition Regulatory Councils. Pursuant to section 6(a) of the Office of Federal Procurement Policy Act, as amended, 41 U.S.C. 405(a), the Defense Acquisition Regulatory Council and the Civilian Agency Acquisition Council shall ensure that the policies established herein are incorporated in the FAR within 180 days from the date this order is issued.

Sec. 9. Judicial Review. This order does not create any right or benefit, substantive or procedural, enforceable by a non-Federal party against the United States, its officers or employees, or any other person.

/s/ William J. Clinton

THE WHITE HOUSE

April 21, 1993.

EXECUTIVE ORDER 12856

FEDERAL COMPLIANCE WITH RIGHT -TO-KNOW LAWS AND POLLUTION PREVENTION REQUIREMENTS

HISTORY: Aug. 3, 1993; 58 FR 41981, Aug. 6, 1993

WHEREAS, the Emergency Planning and Community Rig ht-to-Know Act of 1986 (42 U.S.C. 11001-11050) (EPCRA) established programs to provide the public with important information on the hazardous and toxic chemicals in their communities, and established emergency planning and notification requirements to prot ect the public in the event of a release of extremely hazardous substances;

WHEREAS, the Federal Government should be a good neighbor to local communities by becoming a leader in providing information to the public concerning toxic and hazardous chemi cals and extremely hazardous substances at Federal facilities, and in planning for and preventing harm to the public through the planned or unplanned releases of chemicals;

WHEREAS, the Pollution Prevention Act of 1990 (42 U.S.C. 13101 -13109) (PPA) es tablished that it is the national policy of the United States that, whenever feasible, pollution should be prevented or reduced at the source; that pollution that cannot be prevented should be recycled in an environmentally safe manner; that pollution that cannot be prevented or recycled should be treated in an environmentally safe manner; and that disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner;

WHEREAS, the PPA required the Administrator of the Environmental Protection Agency (EPA) to promote source reduction practices in other agencies;

WHEREAS, the Federal Government should become a leader in the field of pollution prevention through the management of its facilities, its acquisition practices, and in supporting the development of innovative pollution prevention programs and technologies;

WHEREAS, the environmental, energy, and economic benefits of energy and water use reductions are very signif icant; the scope of innovative pollution prevention programs must be broad to adequately address the highest-risk environmental problems and to take full advantage of technological opportunities in sectors other than industrial manufacturing; the Energy Po licy Act of 1992 (Public Law 102-486 of October 24, 1992) requires the Secretary of Energy to work with other Federal agencies to significantly reduce the use of energy and reduce the related environmental impacts by promoting use of energy efficiency and renewable energy technologies; and

WHEREAS, as the largest single consumer in the Nation, the Federal Government has the opportunity to realize significant economic as well as environmental benefits of pollution prevention;

AND IN ORDER TO:

Ensure that all Federal agencies conduct their facility management and acquisition activities so that, to the maximum extent practicable, the quantity of toxic chemicals entering any wastestream, including any releases to the environment, is reduced as ex peditiously as possible through source reduction; that waste that is generated is recycled to the maximum extent practicable; and that any wastes remaining are stored, treated or disposed of in a manner protective of public health and the environment;

Require Federal agencies to report in a public manner toxic chemicals entering any wastestream from their facilities, including any releases to the environment, and to improve local emergency planning, response, and accident notification; and

Help en courage markets for clean technologies and safe alternatives to extremely hazardous substances or toxic chemicals through revisions to specifications and standards, the acquisition and procurement process, and the testing of innovative pollution prevention technologies at Federal facilities or in acquisitions;

NOW THEREFORE, by the authority vested in me as President by the Constitution and the laws of the United States of America, including the EPCRA, the PPA, and section 301 of title 5, United States Code, it is hereby ordered as follows:

Section 1. Applicability.

1 -101. As delineated below, the head of each Federal agency is responsible for ensuring that all necessary actions are taken for the prevention of pollution with respect to that agency 's activities and facilities, and for ensuring that agency's compliance with pollution prevention and emergency planning and community right -to-know provisions established pursuant to all implementing regulations issued pursuant to EPCRA and PPA.

1 -102. Except as otherwise noted, this order is applicable to all Federal agencies that either own or operate a "facility" as that term is defined in section 329(4) of EPCRA, if such facility meets the threshold requirements set forth in EPCRA for compliance a s modified by section 3 -304(b) of this order ("covered facilities"). Except as provided in section 1 -103 and section 1-104 below, each Federal agency must apply all of the provisions of this order to each of its covered facilities, including those faciliti es which are subject, independent of this order, to the provisions of EPCRA and PPA (e.g., certain Government -owned/contractor -operated facilities (GOCO's), for chemicals meeting EPCRA thresholds). This order does not apply to Federal agency facilities out side the customs territory of the United States, such as United States diplomatic and consular missions abroad.

1 -103. Nothing in this order alters the obligations which GOCO's and Government corporation facilities have under EPCRA and PPA independent of this order or subjects such facilities to EPCRA or PPA if they are otherwise excluded. However, consistent with section 1 -104 below, each Federal agency shall include the releases and transfers from all such facilities when meeting all of the Federal a gency's responsibilities under this order.

1 -104. To facilitate compliance with this order, each Federal agency shall provide, in all future contracts between the agency and its relevant contractors, for the contractor to supply to the Federal agency all information the Federal agency deems necessary for it to comply with this order. In addition, to the extent that compliance with this order is made more difficult due to lack of information from existing contractors, Federal agencies shall take practic al steps to obtain the information needed to

comply with this order from such contractors.

Sec. 2-2. Definitions.

2-201. All definitions found in EPCRA and PPA and implementing regulations are incorporated in this order by reference, with the following exception: for the purposes of this order, the term "person", as defined in section 329(7) of EPCRA, also includes Federal agencies.

2-202. Federal agency means an Executive agency, as defined in 5 USC 105. For the purpose of this order, military departments, as defined in 5 USC 102, are covered under the auspices of the Department of Defense.

2-203. Pollution Prevention means "source reduction," as defined in the PPA, and other practices that reduce or eliminate the creation of pollutants through: (a) increased efficiency in the use of raw materials, energy, water, or other resources; or (b) protection of natural resources by conservation.

2-204. GOCO means a Government-owned/contractor-operated facility which is owned by the Federal Government but all or portions of which are operated by private contractors.

2-205. Administrator means the Administrator of the EPA.

2-206. Toxic Chemical means a substance on the list described in section 313(c) of EPCRA.

2-207. Toxic Pollutants. For the purposes of section 3-302(a) of this order, the term "toxic pollutants" shall include, but is not necessarily limited to, those chemicals at a Federal facility subject to the provisions of section 313 of EPCRA as of December 1, 1993. Federal agencies also may choose to include releases and transfers of other chemicals, such as "extremely hazardous chemicals" as defined in section 329(3) of EPCRA, hazardous wastes as defined under the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901-6986) (RCRA), or hazardous air pollutants under the Clean Air Act Amendments (42 U.S.C. 7403-7626); however, for the purposes of establishing the agency's baseline under 3-302(c), such "other chemicals" are in addition to (not instead of) the section 313 chemicals. The term "toxic pollutants" does not include hazardous waste subject to remedial action generated prior to the date of this order.

Sec. 3-3. Implementation.

3-301. Federal Agency Strategy. Within 12 months of the date of this order, the head of each Federal agency must develop a written pollution prevention strategy to achieve the requirements specified in sections 3-302 through 3-305 of this order for that agency. A copy thereof shall be provided to the Administrator. Federal agencies are encouraged to involve the public in developing the required strategies under this order and in monitoring their subsequent progress in meeting the requirements of this order. The strategy shall include, but shall not be limited to, the following elements:

(a) A pollution prevention policy statement, developed by each Federal agency, designating principal responsibilities for development, implementation, and evaluation of the strategy. The statement shall reflect the Federal agency's commitment to incorporate pollution prevention through source reduction in

facility management and acquisition, and it shall identify an individual responsible for coordinating the Federal agency's efforts in this area.

(b) A commitment to utilize pollution prevention through source reduction, where practicable, as the primary means of achieving and maintaining compliance with all applicable Federal, State, and local environmental requirements.

3-302. Toxic Chemical Reduction Goals. (a) The head of each Federal agency subject to this order shall ensure that the agency develops voluntary goals to reduce the agency's total releases of toxic chemicals to the environment and off-site transfers of such toxic chemicals for treatment and disposal from facilities covered by this order by 50 percent by December 31, 1999. To the maximum extent practicable, such reductions shall be achieved by implementation of source reduction practices.

(b) The baseline for measuring reductions for purposes of achieving the 50 percent reduction goal for each Federal agency shall be the first year in which releases of toxic chemicals to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic chemicals reported in the baseline year for all of that Federal agency's facilities meeting the threshold applicability requirements set forth in section 1-102 of this order. In no event shall the baseline be later than the 1994 reporting year.

(c) Alternatively, a Federal agency may choose to achieve a 50 percent reduction goal for toxic pollutants. In such event, the Federal agency shall delineate the scope of its reduction program in the written pollution prevention strategy that is required by section 3-301 of this order. The baseline for measuring reductions for purposes of achieving the 50 percent reduction requirement for each Federal agency shall be the first year in which releases of toxic pollutants to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported for each of that Federal agency's facilities encompassed by section 3-301. In no event shall the baseline year be later than the 1994 reporting year. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic pollutants reported by the agency in the baseline year. For any toxic pollutants included by the agency in determining its baseline under this section, in addition to toxic chemicals under EPCRA, the agency shall report on such toxic pollutants annually under the provisions of section 3-304 of this order, if practicable, or through an agency report that is made available to the public.

(d) The head of each Federal agency shall ensure that each of its covered facilities develops a written pollution prevention plan no later than the end of 1995, which sets forth the facility's contribution to the goal established in section 3-302(a) of this order. Federal agencies shall conduct assessments of their facilities as necessary to ensure development of such plans and of the facilities' pollution prevention programs.

3-303. Acquisition and Procurement Goals. (a) Each Federal agency shall establish a plan and goals for eliminating or reducing the unnecessary acquisition by that agency of products containing extremely hazardous substances or toxic chemicals. Similarly, each Federal agency shall establish a plan and goal for voluntarily reducing its own manufacturing, processing, and use of extremely hazardous substances and toxic chemicals. Priorities shall be developed by Federal agencies, in coordination with EPA, for implementing this section.

(b) Within 24 months of the date of this order, the Department of Defense (DOD) and the General

Services Administration (GSA), and other agencies, as appropriate, shall review their agency's standardized documents, including specifications and standards, and identify opportunities to eliminate or reduce the use by their agency of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of their agency mission. The EPA shall assist agencies in meeting the requirements of this section, including identifying substitutes and setting priorities for these reviews. By 1999, DOD, GSA and other affected agencies shall make all appropriate revisions to these specifications and standards.

(c) Any revisions to the Federal Acquisition Regulation (FAR) necessary to implement this order shall be made within 24 months of the date of this order.

(d) Federal agencies are encouraged to develop and test innovative pollution prevention technologies at their facilities in order to encourage the development of strong markets for such technologies. Partnerships should be encouraged between industry, Federal agencies, Government laboratories, academia, and others to assess and deploy innovative environmental technologies for domestic use and for markets abroad.

3-304. Toxics Release Inventory/Pollution Prevention Act Reporting. (a) The head of each Federal agency shall comply with the provisions set forth in section 313 of EPCRA, section 6607 of PPA, all implementing regulations, and future amendments to these authorities, in light of applicable guidance as provided by EPA.

(b) The head of each Federal agency shall comply with these provisions without regard to the Standard Industrial Classification (SIC) delineations that apply to the Federal agency's facilities, and such reports shall be for all releases, transfers, and wastes at such Federal agency's facility without regard to the SIC code of the activity leading to the release, transfer, or waste. All other existing statutory or regulatory limitations or exemptions on the application of EPCRA section 313 shall apply to the reporting requirements set forth in section 3-304(a) of this order.

(c) The first year of compliance shall be no later than for the 1994 calendar year, with reports due on or before July 1, 1995.

3-305. Emergency Planning and Community Right-to-Know Reporting Responsibilities. The head of each Federal agency shall comply with the provisions set forth in sections 301 through 312 of EPCRA, all implementing regulations, and future amendments to these authorities, in light of any applicable guidance as provided by EPA. Effective dates for compliance shall be: (a) With respect to the provisions of section 302 of EPCRA, emergency planning notification shall be made no later than 7 months after the date of this order.

(b) With respect to the provisions of section 303 of EPCRA, all information necessary for the applicable Local Emergency Planning Committee (LEPC's) to prepare or revise local Emergency Response Plans shall be provided no later than 1 year after the date of this order.

(c) To the extent that a facility is required to maintain Material Safety Data Sheets under any provisions of law or Executive order, information required under section 311 of EPCRA shall be submitted no later than 1 year after the date of this order, and the first year of compliance with section 312 shall be no later than the 1994 calendar year, with reports due on or before March 1, 1995.

(d) The provisions of section 304 of EPCRA shall be effective beginning January 1, 1994.

(e) These compliance dates are not intended to delay implementation of earlier timetables already agreed to by Federal agencies and are inapplicable to the extent they interfere with those timetables.

Sec. 4-4. Agency Coordination.

4-401. By February 1, 1994, the Administrator shall convene an Interagency Task Force composed of the Administrator, the Secretaries of Commerce, Defense, and Energy, the Administrator of General Services, the Administrator of the Office of Procurement Policy in the Office of Management and Budget, and such other agency officials as deemed appropriate based upon lists of potential participants submitted to the Administrator pursuant to this section by the agency head. Each agency head may designate other senior agency officials to act in his/her stead, where appropriate. The Task Force will assist the agency heads in the implementation of the activities required under this order.

4-402. Federal agencies subject to the requirements of this order shall submit annual progress reports to the Administrator beginning on October 1, 1995. These reports shall include a description of the progress that the agency has made in complying with all aspects of this order, including the pollution reductions requirements. This reporting requirement shall expire after the report due on October 1, 2001.

4-403. Technical Advice. Upon request and to the extent practicable, the Administrator shall provide technical advice and assistance to Federal agencies in order to foster full compliance with this order. In addition, to the extent practicable, all Federal agencies subject to this order shall provide technical assistance, if requested, to LEPC's in their development of emergency response plans and in fulfillment of their community right-to-know and risk reduction responsibilities.

4-404. Federal agencies shall place high priority on obtaining funding and resources needed for implementing all aspects of this order, including the pollution prevention strategies, plans, and assessments required by this order, by identifying, requesting, and allocating funds through line-item or direct funding requests. Federal agencies shall make such requests as required in the Federal Agency Pollution Prevention and Abatement Planning Process and through agency budget requests as outlined in Office of Management and Budget (OMB) Circulars A-106 and A-11, respectively. Federal agencies should apply, to the maximum extent practicable, a life cycle analysis and total cost accounting principles to all projects needed to meet the requirements of this order.

4-405. Federal Government Environmental Challenge Program. The Administrator shall establish a "Federal Government Environmental Challenge Program" to recognize outstanding environmental management performance in Federal agencies and facilities. The program shall consist of two components that challenge Federal agencies; (a) to agree to a code of environmental principles to be developed by EPA, in cooperation with other agencies, that emphasizes pollution prevention, sustainable development and state-of-the-art environmental management programs, and (b) to submit applications to EPA for individual Federal agency facilities for recognition as "Model Installations." The program shall also include a means for recognizing individual Federal employees who demonstrate outstanding leadership in pollution prevention.

Sec. 5 -5. Compliance.

5 -501. By December 31, 1993, the head of each Federal agency shall pro vide the Administrator with a preliminary list of facilities that potentially meet the requirements for reporting under the threshold provisions of EPCRA, PPA, and this order.

5 -502. The head of each Federal agency is responsible for ensuring that su ch agency take all necessary actions to prevent pollution in accordance with this order, and for that agency's compliance with the provisions of EPCRA and PPA. Compliance with EPCRA and PPA means compliance with the same substantive, procedural, and other statutory and regulatory requirements that would apply to a private person. Nothing in this order shall be construed as making the provisions of sections 325 and 326 of EPCRA applicable to any Federal agency or facility, except to the extent that such Fede ral agency or facility would independently be subject to such provisions. EPA shall consult with Federal agencies, if requested, to determine the applicability of this order to particular agency facilities.

5 -503. Each Federal agency subject to this o rder shall conduct internal reviews and audits, and take such other steps, as may be necessary to monitor compliance with sections 3 -304 and 3-305 of this order.

5 -504. The Administrator, in consultation with the heads of Federal agencies, may conduct such reviews and inspections as may be necessary to monitor compliance with sections 3 -304 and 3-305 of this order. Except as excluded under section 6 -601 of this order, all Federal agencies are encouraged to cooperate fully with the efforts of the Admini strator to ensure compliance with sections 3 -304 and 3-305 of this order.

5 -505. Federal agencies are further encouraged to comply with all state and local right -to-know and pollution prevention requirements to the extent that compliance with such law s and requirements is not otherwise already mandated.

5 -506. Whenever the Administrator notifies a Federal agency that it is not in compliance with an applicable provision of this order, the Federal agency shall achieve compliance as promptly as is practicable.

5 -507. The EPA shall report annually to the President on Federal agency compliance with the provisions of section 3 -304 of this order.

5 -508. To the extent permitted by law and unless such documentation is withheld pursuant to section 6-601 of this order, the public shall be afforded ready access to all strategies, plans, and reports required to be prepared by Federal agencies under this order by the agency preparing the strategy, plan, or report. When the reports are submitted to EPA, EPA shall compile the strategies, plans, and reports and make them publicly available as well. Federal agencies are encouraged to provide such strategies, plans, and reports to the State and local authorities where their facilities are located for an additional point of access to the public.

Sec. 6 -6. Exemption.

6 -601. In the interest of national security, the head of a Federal agency may request from the President an exemption from complying with the provisions of any or all aspects of this order for

particular Federal agency facilities, provided that the procedures set forth in section 120(j)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9620(j)(1)), are followed. To the maximum extent practicable, and without compromising national security, all Federal agencies shall strive to comply with the purposes, goals, and implementation steps set forth in this order.

Sec. 7-7. General Provisions.

7-701. Nothing in this order shall create any right or benefit, substantive or procedural, enforceable by a party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.

/s/ William J. Clinton

THE WHITE HOUSE

August 3, 1993.

EXECUTIVE ORDER 12873

FEDERAL ACQUISITION, RECYCLING, AND WASTE PREVENTION

HISTORY: Oct. 20, 1993; 58 FR 54911, Oct. 22, 1993

WHEREAS, the Nation's interest is served when the Federal Government can make more efficient use of natural resources by maximizing recy cling and preventing waste wherever possible;

WHEREAS, this Administration is determined to strengthen the role of the Federal Government as an enlightened, environmentally conscious and concerned consumer;

WHEREAS, the Federal Government should --through cost-effective waste prevention and recycling activities --work to conserve disposal capacity, and serve as a model in this regard for private and other public institutions; and

WHEREAS, the use of recycled and environmentally preferable produ cts and services by the Federal Government can spur private sector development of new technologies and use of such products, thereby creating business and employment opportunities and enhancing regional and local economies and the national economy;

NO W, THEREFORE, I, WILLIAM J. CLINTON, by the authority vested in me as President by the Constitution and the laws of the United States of America, including the Solid Waste Disposal Act, Public Law 89-272, 79 Stat. 997, as amended by the Resource Conservati on and Recovery Act ("RCRA"), Public Law 94-580, 90 Stat. 2795 as amended (42 USC 6901 -6907), and section 301 of title 3, United States Code, hereby order as follows:

PART 1 -- PREAMBLE

Section 101. Consistent with the demands of efficiency and cost effect iveness, the head of each Executive agency shall incorporate waste prevention and recycling in the agency's daily operations and work to increase and expand markets for recovered materials through greater Federal Government preference and demand for such p roducts.

Sec. 102. Consistent with policies established by Office of Federal Procurement Policy ("OFPP") Policy Letter 92-4, agencies shall comply with executive branch policies for the acquisition and use of environmentally preferable products and servic es and implement cost-effective procurement preference programs favoring the purchase of these products and services.

Sec. 103. This order creates a Federal Environmental Executive and establishes high -level Environmental Executive positions within each a gency to be responsible for expediting the implementation of this order and statutes that pertain to this order.

PART 2 -- DEFINITIONS

For purposes of this order:

Sec. 201. "Environmentally preferable" means products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

Sec. 202. "Executive agency" or "agency" means an Executive agency as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense.

Sec. 203. "Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. "Postconsumer material" is a part of the broader category of "recovered material".

Sec. 204. "Acquisition" means the acquiring by contract with appropriated funds for supplies or services (including construction) by and for the use of the Federal Government through purchase o r lease, whether the supplies or services are already in existence or must be created, developed, demonstrated and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency n eeds, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration and those technical and management functions directly related to the process of fulfilling agency needs by contract.

Sec. 20 5. "Recovered materials" means waste materials and by -products which have been recovered or diverted from solid waste, but such term does not include those materials and by -products generated from, and commonly reused within, an original manufacturing proc ess (42 U.S.C. 6903(19)).

Sec. 206. "Recyclability" means the ability of a product or material to be recovered from, or otherwise diverted from, the solid waste stream for the purpose of recycling.

Sec. 207. "Recycling" means the series of activities, in cluding collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion.

Sec. 208. "Waste prevention," also known as "source reduction," means any change in the design, manufacturing, purchase or use of materials or products (including packaging) to reduce their amount or toxicity before they become municipal solid waste. Wa ste prevention also refers to the reuse of products or materials.

Sec. 209. "Waste reduction" means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable pro ducts.

Sec. 210. "Life Cycle Cost" means the amortized annual cost of a product, including capital costs, installation costs, operating costs, maintenance costs and disposal costs discounted over the lifetime of the product.

Sec. 211. "Life Cycle Analysis" means the comprehensive examination of a product's environmental and economic effects throughout its lifetime including new material extraction, transportation, manufacturing, use, and disposal.

PART 3 -- THE ROLE OF THE FEDERAL ENVIRONMENTAL EXECUTIVE AND AGENCY ENVIRONMENTAL EXECUTIVES

Sec. 301. Federal Environmental Executive. (a) A Federal Environmental Executive shall be designated by the President and shall be located within the Environmental Protection Agency ("EPA"). The Federal Environmental Executive shall take all actions necessary to ensure that the agencies comply with the requirements of this order and shall generate an annual report to the Office of Management and Budget ("OMB"), at the time of agency budget submissions, on the actions taken by the agencies to comply with the requirements of this order. In carrying out his or her functions, the Federal Environmental Executive shall consult with the Director of the White House Office on Environmental Policy.

(b) Staffing. A minimum of four (4) full time staff persons are to be provided by the agencies listed below to assist the Federal Environmental Executive, one of whom shall have experience in specification review and program requirements, one of whom shall have experience in procurement practices, and one of whom shall have experience in solid waste prevention and recycling. These four staff persons shall be appointed and replaced as follows:

(1) a representative from the Department of Defense shall be detailed for not less than one year and no more than two years;

(2) a representative from the General Services Administration ("GSA") shall be detailed for not less than one year and no more than two years;

(3) a representative from EPA shall be detailed for not less than one year and no more than two years; and

(4) a representative from one other agency determined by the Federal Environmental Executive shall be detailed on a rotational basis for not more than one year.

(c) Administration. Agencies are requested to make their services, personnel and facilities available to the Federal Environmental Executive to the maximum extent practicable for the performance of functions under this order.

(d) Committees and Work Groups. The Federal Environmental Executive shall establish committees and work groups to identify, assess, and recommend actions to be taken to fulfill the goals, responsibilities, and initiatives of the Federal Environmental Executive. As these committees and work groups are created, agencies are requested to designate appropriate personnel in the areas of procurement and acquisition, standards and specifications, electronic commerce, facilities management, waste prevention, and recycling, and others as needed to staff and work on the initiatives of the Executive.

(e) Duties. The Federal Environmental Executive, in consultation with the Agency Environmental Executives, shall:

(1) identify and recommend initiatives for government -wide implementation that will promote the purposes of this order, including:

(A) the development of a federal plan for agency implementation of this order and appropriate incentives to encourage the acquisition of recycled and environmentally preferable products by the Federal Government;

(B) the develo pment of a federal implementation plan and guidance for instituting economically efficient federal waste prevention, energy and water efficiency programs, and recycling programs within each agency; and

(C) the development of a plan for making maximum use of available funding assistance programs;

(2) collect and disseminate information electronically concerning methods to reduce waste, materials that can be recycled, costs and savings associated with waste prevention and recycling, and current market sources of products that are environmentally preferable or produced with recovered materials;

(3) provide guidance and assistance to the agencies in setting up and reporting on agency programs and monitoring their effectiveness; and

(4) coo rdinate appropriate government-wide education and training programs for agencies.

Sec. 302. Agency Environmental Executives. Within 90 days after the effective date of this order, the head of each Executive department and major procuring agency shall des ignate an Agency Environmental Executive from among his or her staff, who serves at a level no lower than at the Deputy Assistant Secretary level or equivalent. The Agency Environmental Executive will be responsible for:

(a) coordinating all environmen tal programs in the areas of procurement and acquisition, standards and specification review, facilities management, waste prevention and recycling, and logistics;

(b) participating in the interagency development of a Federal plan to:

(1) create an awareness and outreach program for the private sector to facilitate markets for environmentally preferable and recycled products and services, promote new technologies, improve awareness about federal efforts in this area, and expedite agency efforts t o procure new products identified under this order;

(2) establish incentives, provide guidance and coordinate appropriate educational programs for agency employees; and

(3) coordinate the development of standard agency reports required by this order;

(c) reviewing agency programs and acquisitions to ensure compliance with this order.

PART 4 -- ACQUISITION PLANNING AND AFFIRMATIVE PROCUREMENT PROGRAMS

Sec. 401. Acquisition Planning. In developing plans, drawings, work statements, specificat ions, or other product descriptions, agencies shall consider the following factors: elimination of virgin material

requirements; use of recovered materials; reuse of product; life cycle cost; recyclability; use of environmentally preferable products; waste prevention (including toxicity reduction or elimination); and ultimate disposal, as appropriate. These factors should be considered in acquisition planning for all procurements and in the evaluation and award of contracts, as appropriate. Program and acqu isition managers should take an active role in these activities.

Sec. 402. Affirmative Procurement Programs. The head of each Executive agency shall develop and implement affirmative procurement programs in accordance with RCRA section 6002 (42 USC 696 2) and this order. Agencies shall ensure that responsibilities for preparation, implementation and monitoring of affirmative procurement programs are shared between the program personnel and procurement personnel. For the purposes of all purchases made pur suant to this order, EPA, in consultation with such other Federal agencies as appropriate, shall endeavor to maximize environmental benefits, consistent with price, performance and availability considerations, and shall adjust bid solicitation guidelines as necessary in order to accomplish this goal.

(a) Agencies shall establish affirmative procurement programs for all designated EPA guideline items purchased by their agency. For newly designated items, agencies shall revise their internal programs within one year from the date EPA designated the new items.

(b) For the currently designated EPA guideline items, which are: (i) concrete and cement containing fly ash; (ii) recycled paper products; (iii) re -refined lubricating oil; (iv) retread tires; an d (v) insulation containing recovered materials; and for all future guideline items, agencies shall ensure that their affirmative procurement programs require that 100 percent of their purchases of products meet or exceed the EPA guideline standards unless written justification is provided that a product is not available competitively within a reasonable time frame, does not meet appropriate performance standards, or is only available at an unreasonable price.

(c) The Agency Environmental Executives wi ll track agencies' purchases of designated EPA guideline items and report agencies' purchases of such guideline items to the Federal Environmental Executive. Agency Environmental Executives will be required to justify to the Federal Environmental Executive as to why the item(s) have not been purchased or submit a plan for how the agencies intend to increase their purchases of the designated item(s).

(d) Agency affirmative procurement programs, to the maximum extent practicable, shall encourage that:

(1) documents be transferred electronically,

(2) all government documents printed internally be printed double -sided, and

(3) contracts, grants, and cooperative agreements issued after the effective date of this order include provisions that require documents to be printed double -sided on recycled paper meeting or exceeding the standards established in this order or in future EPA guidelines.

Sec. 403. Procurement of Existing Guideline Items. Within 90 days after the effective date of this order, the head of each Executive agency that has not implemented an affirmative procurement program shall

ensure that the affirmative procurement program has been established and is being implemented to the maximum extent practicable.

Sec. 404. Electroni c Acquisition System. To reduce waste by eliminating unnecessary paper transactions in the acquisition process and to foster accurate data collection and reporting of agencies' purchases of recycled content and environmentally preferred products, the execu tive branch will implement an electronic commerce system consistent with the recommendations adopted as a result of the National Performance Review.

PART 5 -- STANDARDS, SPECIFICATIONS AND DESIGNATION OF ITEMS

Sec. 501. Specifications, Product Descriptions and Standards. Where applicable, Executive agencies shall review and revise federal and military specifications, product descriptions and standards to enhance Federal procurement of products made from recovered materials or that are environmentally prefer able. When converting to a Commercial Item Description (CID), agencies shall ensure that environmental factors have been considered and that the CID meets or exceeds the environmentally preferable criteria of the government specification or product descrip tion. Agencies shall report annually on their compliance with this section to the Federal Environmental Executive for incorporation into the annual report to OMB referred to in section 301 of this order.

(a) If an inconsistency with RCRA Section 6002 o r this order is identified in a specification, standard, or product description, the Federal Environmental Executive shall request that the Environmental Executive of the pertinent agency advise the Federal Environmental Executive as to why the specificati on cannot be revised or submit a plan for revising it within 60 days.

(b) If an agency is able to revise an inconsistent specification but cannot do so within 60 days, it is the responsibility of that agency's Environmental Executive to monitor and im plement the plan for revising it.

Sec. 502. Designation of Items that Contain Recovered Materials. In order to expedite the process of designating items that are or can be made with recovered materials, EPA shall institute a new process for designating t hese items in accordance with RCRA section 6002(e) as follows. (a) EPA shall issue a Comprehensive Procurement Guideline containing designated items that are or can be made with recovered materials.

(1) The proposed guideline shall be published for pu blic comment in the Federal Register within 180 days after the effective date of this order and shall be updated annually after publication for comment to include additional items.

(2) Once items containing recovered materials have been designated by EPA through the new process established pursuant to this section and in compliance with RCRA section 6002, agencies shall modify their affirma -tive procurement programs to require that, to the maximum extent practicable, their purchases of products meet o r exceed the EPA guideline standards unless written justification is provided that a product is not available competitively, not available within a reasonable time frame, does not meet appropriate performance standards, or is only available at an unreasona ble price.

(b) Concurrent with the issuance of the Comprehensive Procurement Guideline required by section 502(a) of this order, EPA shall publish for public comment in the Federal Register Recovered Material Advisory Notice(s) that present the range of recovered material content levels within which the

designated recycled items are currently available. These levels shall be updated periodically after publication for comment to reflect changes in market conditions.

Sec. 503. Guidance for Environmentally Preferable Products. In accordance with this order, EPA shall issue guidance that recommends principles that Executive agencies should use in making determinations for the preference and purchase of environmentally preferable products.

(a) Proposed guidance shall be published for public comment in the Federal Register within 180 days after the effective date of this order, and may be updated after public comment, as necessary, thereafter. To the extent necessary, EPA may issue additional guidance for public comment on how the principles can be applied to specific product categories.

(b) Once final guidance for environmentally preferable products has been issued by EPA, Executive agencies shall use these principles, to the maximum extent practicable, in identifying and purchasing environmentally preferable products and shall modify their procurement programs by reviewing and revising specifications, solicitation procedures, and policies as appropriate.

Sec. 504. Minimum Content Standard for Printing and Writing Paper. Executive agency heads shall ensure that agencies shall meet or exceed the following minimum materials content standards when purchasing or causing the purchase of printing and writing paper:

(a) For high speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, and white woven envelopes, the minimum content standard shall be no less than 20 percent postconsumer materials beginning December 31, 1994. This minimum content standard shall be increased to 30 percent beginning on December 31, 1998.

(b) For other uncoated printing and writing paper, such as writing and office paper, book paper, cotton fiber paper, and cover stock, the minimum content standard shall be 50 percent recovered materials, including 20 percent postconsumer materials beginning on December 31, 1994. This standard shall be increased to 30 percent beginning on December 31, 1998.

(c) As an alternative to meeting the standards in sections 504(a) and (b), for all printing and writing papers, the minimum content standard shall be no less than 50 percent recovered materials that are a waste material byproduct of a finished product other than a paper or textile product which would otherwise be disposed of in a landfill, as determined by the State in which the facility is located.

(1) The decision not to procure recycled content printing and writing paper meeting the standards specified in this section shall be based solely on a determination by the contracting officer that a satisfactory level of competition does not exist, that the items are not available within a reasonable time period, or that the available items fail to meet reasonable performance standards established by the agency or are only available at an unreasonable price.

(2) Each agency should implement waste prevention techniques, as specified in section 402(d) of this order, so that total annual expenditures for recycled content printing and writing paper do not exceed current annual budgets for paper products as measured by average annual expenditures, adjusted for inflation based on the Consumer Price Index or other suitable indices. In determining a target budget for printing and writing paper, agencies may take into account such factors as employee increases or decreases, new agency or statutory initiatives, and episodic or unique requirements (e.g.,

census).

(3) Effective immediately, all agencies making solicitations for the purchase of printing and writing paper shall seek bids for paper with postconsumer material or recovered waste material as described in section 504(c).

Sec. 505. Revision of Brightness Specifications and Standards. The General Services Administration and other Federal agencies are directed to identify, evaluate and revise or eliminate any standards or specifications unrelated to performance that present barriers to the purchase of paper or paper products made by production processes that minimize emissions of harmful byproducts. This evaluation shall include a review of unnecessary brightness and stock clause provisions, such as lignin content and chemical pulp requirements. The GSA shall complete the review and revision of such specifications within six months after the effective date of this order, and shall co nsult closely with the Joint Committee on Printing during such process. The GSA shall also compile any information or market studies that may be necessary to accomplish the objectives of this provision.

Sec. 506. Procurement of Re -refined Lubricating Oil and Retread Tires. Within 180 days after the effective date of this order, agencies shall implement the EPA procurement guidelines for re -refined lubricating oil and retread tires.

(a) Commodity managers shall finalize revisions to specifications for r e-refined oil and retread tires, and develop and issue specifications for tire retreading services, as commodity managers shall take affirmative steps to procure these items in accordance with RCRA section 6002.

(b) Once these items become available, fleet managers shall take affirmative steps to procure these items in accordance with RCRA section 6002.

Sec. 507. Product Testing. The Secretary of Commerce, through the National Institute of Standards and Technology ("NIST"), shall establish a program for testing the performance of products containing recovered materials or deemed to be environmentally preferable. NIST shall work with EPA, GSA and other public and private sector organizations that conduct appropriate life cycle analyses to gather information that will assist agencies in making selections of products and services that are environmentally preferable.

(a) NIST shall publish appropriate reports describing testing programs, their results, and recommendations for testing methods and relate d specifications for use by Executive agencies and other interested parties.

(b) NIST shall coordinate with other Executive and State agencies to avoid duplication with existing testing programs.

PART 6 -- AGENCY GOALS AND REPORTING REQUIREMENTS

Sec. 601. Goals for Waste Reduction. Each agency shall establish a goal for solid waste prevention and a goal for recycling to be achieved by the year 1995. These goals shall be submitted to the Federal Environmental Executive within 180 days after the effecti ve date of this order. Progress on attaining these goals shall be reported by the agencies to the Federal Environmental Executive for the annual report specified in section 301 of this order.

Sec. 602. Goal for Increasing the Procurement of Recycled and O ther Environmentally Preferable Products. Agencies shall strive to increase the procurement of products that are environmentally preferable or that are made with recovered materials and set annual goals to maximize the number of recycled products purchased , relative to non -recycled alternatives.

Sec. 603. Review of Implementation. The President's Council on Integrity and Efficiency ("PCIE") will request that the Inspectors General periodically review agencies' affirmative procurement programs and reporting procedures to ensure their compliance with this order.

PART 7 -- APPLICABILITY AND OTHER REQUIREMENTS

Sec. 701. Contractor Operated Facilities. Contracts that provide for contractor operation of a government-owned or leased facility, awarded after the ef fective date of this order, shall include provisions that obligate the contractor to comply with the requirements of this order within the scope of its operations. In addition, to the extent permitted by law and where economically feasible, existing contracts should be modified.

Sec. 702. Real Property Acquisition and Management. Within 90 days after the effective date of this order, and to the extent permitted by law and where economically feasible, Executive agencies shall ensure compliance with the provisions of this order in the acquisition and management of federally owned and leased space. GSA and other Executive agencies shall also include environmental and recycling provisions in the acquisition of all leased space and in the construction of new f ederal buildings.

Sec. 703. Retention of Funds. Within 90 days after the effective date of this order, the Administrator of GSA shall develop a legislative proposal providing authority for Executive agencies to retain a share of the proceeds from the sale of materials recovered through recycling or waste prevention programs and specifying the eligibility requirements for the materials being recycled.

Sec. 704. Model Facility Programs. Each Executive department and major procuring agency shall establish model facility demonstration programs that include comprehensive waste prevention and recycling programs and emphasize the procurement of recycled and environmentally preferable products and services using an electronic data interchange (EDI) system.

Sec. 70 5. Recycling Programs. Each Executive agency that has not already done so shall initiate a program to promote cost effective waste prevention and recycling of reusable materials in all of its facilities. The recycling programs implemented pursuant to this section must be compatible with applicable State and local recycling requirements. Federal agencies shall also consider cooperative ventures with State and local governments to promote recycling and waste reduction in the community.

PART 8 -- AWARENESS

Sec. 801. Agency Awards Program. A government -wide award will be presented annually by the White House to the best, most innovative program implementing the objectives of this order to give greater visibility to these efforts so that they can be incorporated government-wide.

Sec. 802. Internal Agency Awards Programs. Each agency shall develop an internal agency -wide awards program, as appropriate, to reward its most innovative environmental programs. Winners of agency-wide awards will be eligible for the White House award program.

PART 9 -- REVOCATION, LIMITATION AND IMPLEMENTATION

Sec. 901. Executive Order No. 12780, dated October 31, 1991, is hereby revoked.

Sec. 902. This order is intended only to improve the internal management of the executive branch and is not intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any other person.

Sec. 903. The policies expressed in this order, including the requirement s and elements for effective agency affirmative procurement programs, shall be implemented and incorporated in the Federal Acquisition Regulation (FAR) within 180 days after the effective date of this order. The implementation language shall consist of providing specific direction and guidance on agency programs for preference, promotion, estimation, certification, reviewing and monitoring.
Sec. 904. This order shall be effective immediately.

/s/ William J. Clinton
THE WHITE HOUSE
October 20, 1993.

EXECUTIVE ORDER 12969

FEDERAL ACQUISITION AND COMMUNITY RIGHT -TO-KNOW

August 8, 1995

The Emergency Planning and Community Right -to-Know Act of 1986 (42 U.S.C.11001 -11050) ("EPCRA") and the Poll ution Prevention Act of 1990 (42 U.S.C.13101 -13109) ("PPA") established programs to protect public health and the environment by providing the public with important information on the toxic chemicals being released into the air, land, and water in their c ommunities by manufacturing facilities.

The Toxics Release Inventory ("TRI") established pursuant to section 313(j) of EPCRA, 42 U.S.C. 11023(j), based on information required to be reported under section 313 of EPCRA and section 6607 of PPA, 42 U.S.C. 13106, provides the public, industry, and Federal, State, and local governments with a basic tool for making risk -based decisions about management and control of toxic chemicals, that can have significant adverse effects on human health and the environmen t. TRI data allow the public, industry, and government to gauge the progress of industry and government efforts to reduce toxic chemical wastes.

Sharing vital TRI information with the public has provided a strong incentive for reduction in the generation, and, ultimately, release into the environment, of toxic chemicals. Since the inception of the TRI program,
reported releases to the environment under TRI have decreased significantly.

The efficiency of the Federal Government is served when it purch ases high quality supplies and services that have been produced with a minimum impact on the public health and environment of communities surrounding government contractors. Savings associated with reduced raw materials usage, reduced use of costly, ineff icient end-of-pipeline pollution controls, and reduced liability and remediation costs from worker and community claims all serve to increase the economic and efficient provision of essential supplies and services to the government. As a result of TRI reporting, many manufacturers have learned of previously unrecognized significant efficiencies and cost savings in their production processes.

The Federal Government's receipt of timely and quality supplies and services is also served by the general enhancement of relations between government contractors and the communities in which they are situated, as well as the cooperative working relationship between employers and employees who may be subject to exposure to toxic materials.

Information concernin g chemical release and transfer can assist the government to purchase efficiently produced, lower cost, and higher quality supplies and services that also have a minimum adverse impact on community health and the environment.

NOW, THEREFORE, to promote economy and efficiency in government procurement of supplies and services, and by the authority vested in me as President by the Constitution and the laws of the United States of America, including EPCRA, 42 U.S.C. 11001 et seq., PPA, 42 U.S.C. 13101 et s eq., 40 U.S.C. 471 and 486(a), and 3 U.S.C. 301, it is hereby ordered as follows:

Section 1. Policy. It is the policy of the executive branch in procuring supplies and services that, to ensure the economical and efficient procurement of Federal Govern ment contracts, Federal agencies, to the greatest extent practicable, shall contract with companies that report in a public manner on toxic chemicals released to the environment.

Sec. 2. Definitions. 2 -201. All definitions found in EPCRA and PPA and i mplementing regulations are incorporated into this order by reference, with the following exceptions for purposes of this order.

2 -202. "Federal agency" means an "Executive agency," as defined in 5 U.S.C.105. For purposes of this order, military depa rtments, as defined in 5 U.S.C.102, are covered under the auspices of the Department of Defense.

2 -203. "Acquisition" means the acquiring by contract with appropriated funds of supplies or services (including construction) by and for the use of the F ederal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated. Acquisition begins at the point when the Federal department or agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract.

2 -204. "Toxic chemical" means a substance on the list described in section 313(c) of EPCRA, 42 U.S.C. 11023(c), as it exists on the effective date of this order.

2 -205. "Administrator" m eans the Administrator of the United States Environmental Protection Agency ("EPA").

2 -206. "Federal contractor" means an entity that has submitted the successful bid or proposal in response to a competitive acquisition solicitation.

Sec. 3. Appl icability.

3 -301. Each Federal agency shall, to the maximum extent practicable, include in contract solicitations as an eligibility criterion for the award of competitive acquisition contracts expected to equal or exceed $100,000 with the Federal cont ractors described in subsection 3-302, the requirement that such contractors must file (and continue to file for the life of the contract) a Toxic Chemical Release Form ("Form R"), as described in sections 313(a) and (g) of EPCRA, 42 U.S.C. 11023(a) and (g), for each toxic chemical manufactured, processed, or otherwise used by the Federal contractor at a facility, as described in section 313 of EPCRA, 42 U.S.C. 11023, and section 6607 of PPA, 42 U.S.C. 13106.

3 -302. The Federal contractors subject to the eligibility criterion described in subsection 3 -301 above are those who currently report to the TRI pursuant to section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A), that is, manufacturers having Standard Industrial Classification Code ("SIC") designations of 20 through 39 (as in effect on July 1, 1985) has satisfied the requirement in subsection 3-301 if the contractor certifies in a solicitation that it:

(a) Does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);
(b) Does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);
(c) Does not meet the reporting thresholds established under section 313(f) of the EPCRA, 42 U.S.C. 11023(f); or
(d) Has complied fully with the reporting requirements of subsection 4-404.

3-304. Each Federal agency shall require the filings described in subsection 3-301 above to include information on all chemicals identified by the Administrator pursuant to section 313(c) of EPCRA, 42 U.S.C. 11023(c), as of the date of this order.

3-305. Each Federal agency may amend existing contracts, to the extent permitted by law and where practicable, to require the reporting of information specified in subsection 3-301 above.

3-306. As consistent with Title IV of the Federal Acquisition Streamlining Act of 1994 (FASA), Public Law 103-355, and section 4(11) of the Office of Federal Procurement Policy Act, 41 U.S.C. 403(11), the requirements of this order are only applicable to competitive acquisition contracts expected to equal or exceed $100,000.

Sec. 4. Implementation. 4-401. Not later than September 30, 1995, the EPA shall publish in the Federal Register guidance for compliance with this order, including applicability with respect to subcontractors.

4-402. Within 30 days of the issuance of the guidance provided for in subsection 4-401 above, each Federal agency shall include in all acquisition solicitations issued on or after the effective date of this order, the provisions necessary to effect this order.

4-403. For all contracts expected to exceed $500,000, each Federal agency shall consult with the Administrator or the Administrator's designee when the agency believes it is not practicable to include the eligibility requirement of section 3-301 in the contract solicitation or award.

4-404. Each Federal agency shall require each Federal contractor designated in subsection 3-302 above to:
(a) Have included in its response to the contract solicitation a certification, as specified in the guidelines published pursuant to subsection 4-401 of this order, that it will (if awarded the contract) comply with the requirements of subsection 3-301; and
(b) File with the Administrator and each appropriate State pursuant to section 313(a) of EPCRA, 42 U.S.C. 11023(a), the information required by contract is awarded.

4-405. Information submitted to the EPA pursuant to subsection 4-404(b) above shall be subject to the trade secret protections provided by section 322 of EPCRA, 42 U.S.C. 11042. Information that is not trade secret shall be made available to the public pursuant to sections 313(h) and (j) of EPCRA, 42 U.S.C. 11023(h) and (j). The Administrator is directed to review reports submitted pursuant to this order to determine the appropriateness of any claims for trade secret protection.

4-406. When the Administrator determines that a Federal contractor has not filed the necessary forms or complete information as required by subsection 3-301 above, the Administrator or the

Administrator's designee may recommend termination of the contract for convenience. The Administrator shall transmit that recommendation to the head of the contracting agency, and that agency shall consider the recommendation and determine whether to terminate the contract. In carrying out this responsibility, the Administrator may investigate any subject Federal contractor to determine the adequacy of compliance with the provisions of this order and the Administrator's designee may hold such hearings, public or private, as the Administrator deems advisable to assist in the Administrator's determination of compliance.

4 -407. Each contracting agency shall cooperate with the Administrat or and provide such information and assistance as the Administrator may require in the performance of the Administrator's functions under this order.

4 -408. Upon request and to the extent practicable, the Administrator shall provide technical advice and assistance to Federal agencies in order to assist in full compliance with this order.

Sec 5. General Provisions. 5 -501. The requirements of this order shall be implemented and incorporated in acquisition regulations, including the Federal Acquisiti on Regulations (FAR), within 90 days after the effective date of this order.

5 -502. This order is not intended, and should not be construed, to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, it officers, or its employees. This order is not intended, however, to preclude judicial review of final agency decisions in accordance with the Administrative Procedure Act, 5 U.S.C. 701 et seq.

5 -503. This order shall be effe ctive immediately and shall continue to be in effect until revoked.

[signature]

THE WHITE HOUSE,

August 8, 1995

TABLE
USEFUL REFERENCE MATERIALS

Chemical Inventory Management System (CIMS) Users Group Meeting Minutes

September 30, 1997

Silver Spring, Maryland

Prepared for:

National Oceanic and Atmospheric Administration

Contract No. 50WCNA506093
Work Assignment No.01101

October 13, 1997

CONTENTS

1.0 INTRODUCTION

The Chemical Inventory Management System (CIMS) Users Group of the National Oceanic and Atmospheric Administration (NOAA) held its first meeting September 30 through October 2, 1997, at NOAA's headquarters offices in Silver Spring, Maryland. The objectives of the meeting were to:

- √ Become familiarized with the EPOCH software
- √ Understand the short and long term project goals
- √ Understand everyone's roles and responsibilities
- √ Identify the decision areas and create a chart with the decision points
- √ Decide how the chemical master files will be maintained
- √ Understand and make decision regarding bar coding issues
  - Decide on the type of bar coding sequencing method to be use
  - Decide on the size and paper type the bar code will be printed on
  - Determine the type of bar coding hardware and software to be used
- √ Determine how facilities will be identified in the database
- √ Understand the funding for hardware, software, and traveling
- √ Create draft scenarios
- √ Understand the evaluation process
- √ Schedule the next meeting
- √ Discuss the home page
- √ Discuss Information Technology Management Reform Act (ITMRA)
- √ Discuss article for NOAA newsletter
  - Take group picture

During the meeting, the group first observed a demonstration of Logical Data System, Inc's EPOCH chemical inventory management software package. The group then discussed issues related to the implementation of the EPOCH system, agreed upon a number of decisions related to those issues, and identified areas in which decisions remain to be made. Finally, the group discussed various scenarios related to the pilot test of the system, including a number of obstacles and needs that might arise during its implementation. The users group then discussed the criteria for the continuing evaluation of the EPOCH system.

Representatives of each of the line and staff offices and the Occupational Health Division of NOAA, as well as two of the administration's regional environmental compliance officers (RECO), make up the users group and were present at the first meeting of the group. Those individuals are:

- Ms. Lynnette Ansell, Eastern Administrative Support Center (EASC) RECO
- Ms. Jean Durosko, alternate to Mr. Nir Barnea, National Ocean Service (NOS)

- Ms. Kristin Kniskern, National Environmental Satellite, Data, and Information Service (NESDIS)
- Mr. Jim Schell, Office of NOAA corporate Operations (ONCO)
- Ms. Barbara Jobe, National Marine Fisheries Service (NMFS)
- Mr. Ken Jones, Oceanic and Atmospheric Research (OAR)
- Mr. Roy McCullough, Occupational Health
- Mr. Minh Trinh, Western Administrative Support Center (WASC) RECO
- Mr. Jeff Walker, EG&G, representing the National Weather Service

Also present during the meeting were Mr. William Hope, Director, Environmental Software Products, Logical Data Systems, Inc., who demonstrated the EPOCH system on the first day of the meeting; Ms. Sue Kennedy of NOAA's Environmental Compliance Staff Director, who introduced the issues to be discussed during the second day of the meeting; and Ms. Deborah Albert, Mr. Michael Hunt, Mr. Bryan Smith, and Mr. John Maher of Tetra Tech EM Inc. (Tetra Tech), the contractor supporting NOAA's CIMS project.

The following sections presents summaries of the proceedings of the meeting in chronological order.

2.0 TUESDAY, SEPTEMBER 30, 1997

The single session of the first day of the meeting was devoted to a demonstration of Logical Data System's EPOCH chemical inventory management software. Mr. Hope explained the data entry fields in the chemical and facility master files, as well as the importance of maintaining their consistency from one NOAA facility to the next. During this presentation, the group asked questions to clarify specific points and discussed implementation issues as they related to the database. When Mr. Hope had concluded his presentation, the users group adjourned for the day.

3.0 WEDNESDAY, OCTOBER 1, 1997

During Wednesday's full-day session, the members of the users group focused on in-depth discussion of a number of issues related to implementation of the CIMS Initiative. They developed an understanding of the goals of the CIMS project, as well as the roles and responsibilities of the users group members. Specific subjects they discussed in depth included maintenance of master files, issues related to bar coding and identification of facilities, and consideration of software and hardware requirements. In the course of their deliberations, the members of the users group reached decisions about several issues and identified others that remain to be addressed. The decisions they reached and the outstanding issues they identified are specified below. General decisions related to the overall implementation of the CIMS are presented first, followed by those decisions that affect specific aspects of the EPOCH system.

General Decisions

1. The goals of the CIMS project are to

   - ✓ Save money
   - ✓ Identify opportunities for pollution prevention activities at NOAA facilities
   - ✓ Ensure compliance with pertinent regulations
   - ✓ Conserve staff time by providing ease of use, and
   - ✓ Ensure uniformity of procedures from facility to facility.

2. The members of the users group play a number of roles in the implementation effort and are responsible for

   - ✓ Facilitating transfer of information
   - ✓ Identifying issues of concern to the line offices
   - ✓ Promoting the CIMS project
   - ✓ Informing their alternate representatives to the group of developments
   - ✓ Transmitting to the group issues that arise during the nationwide implementation phase of the project, and
   - ✓ Keeping assistant administrators (AA) informed about issues and progress in implementing the CIMS Initiative.

3. The users group will form two focus groups; one to assist in determining which items should be tracked by chemical container and which items should be tracked by content or lot, as well as which office, consumer, and household hazardous chemicals should be excluded from tracking, and the other to assist in determining the threshold on-site storage time after which a NOAA facility must track chemicals brought from an off-site location.

The focus groups will meet to discuss the issues and develop a proposal for addressing theses issues.

4. To determine the number of facilities at which the CIMS will be implemented, the members will review a list of their line office' s facilities (to be provided by Tetra Tech) to identify any additions or deletions necessary. Tetra Tech will provide the initial list, drawing from the RISKMIS database, NOAA' s facility and employee locator, and the administration' s records of its real property.

5. NOAA' s facilities include only two types, active and inactive. NOAA does not need to specify facilities as being off-line or unstaffed.

6. Ms. Kennedy will prepare a letter to NOAA' s upper management that will communicate to them

   - ✓ Goals and objectives of the CIMS project
   - ✓ Benefits to the facilities
   - ✓ Long-term savings its implementation will bring about
   - ✓ Crucial role of the members of the users group in the implementation of the CIMS Initiative
   - ✓ Cost to the line offices of implementation
   - ✓ Issues related to the identification of facilities and
   - ✓ Schedule for the next users group meeting.

7. The group agreed that a letter should come from Dr. James Baker, Under Secretary for Oceans and Atmosphere and Administrator, in which he would assign the users group responsibility for becoming involved in the development of the CIMS.

8. The users group will identify line office newsletters for which articles will be prepared (EASC, the National Marine Fisheries Service, and various offices of the Department of Commerce publish such newsletters).

9. The Internet home page of the Environmental Compliance Staff (ECS) will be linked to the environmental compliance home pages of line offices; those home pages in turn will be linked to the ECS home page.

10. Members of the users group will track the approximate number of hours they devote to the CIMS project and will forward Ms. Albert this information as well as copies of their travel vouchers.

11. The different specific needs of the various users of the system include the ability to:

RECOs, LECOs, ECS Staff, and ASC Safety Personnel

- ✓ Generate reports on an area-level basis
- ✓ Access to each facility's database

Facilities

- ✓ Track chemicals
- ✓ Generate reports on a subarea-level basis
- ✓ Input data into the database

12. The various users need to have the ability to generate reports by:

- ✓ Line office region
- ✓ Administrative support center region
- ✓ Line office
- ✓ Facility
- ✓ State

Decisions about Specific Issues

1. The central administrator will maintain the master files on chemicals, facilities, and material safety data sheets (MSDS), which will include:

   - ✓ A list of the various lists maintained in the system, such as the list of extremely hazardous substances
   - ✓ Customized reports used throughout NOAA
   - ✓ Updates of master file information
   - ✓ Records of the initial screening and approval of chemicals, as performed with the assistance of RECOs and line office environmental compliance officers (LECO).

2. Chemical aliases will be entered by the system administrator at the facility and the central administrator at NOAA headquarters.

3. No pure chemical or substance that does not have a Chemical Abstract Service (CAS) number will be entered in the system.

4. Chemicals will be tracked by records of amounts received and consumed by the particular facility, with such tracking backed up by periodic checks during audits.

5. Facilities will track janitorial supplies and other chemicals stored on site (the time frame for implementation of this tracking system is to be determined by the focus group).

6. The hierarchy of facility information in the EPOCH system includes division, group, facility, area, and subarea. For NOAA's facilities, the corresponding information will be the line office which owns the property, the RECO, the abbreviated facility name, the building, and the room (with line office tenant identified and refrigerator, cabinet, or other division of subarea specified).

7. The users group will recommend that standard operating procedures (SOP) require that facilities submit MSDSs and other pertinent information about chemicals to the central administrator before those chemicals are purchased.

While their deliberations led to the decisions summarized above, the members of the users group also identified areas in which decisions remained to be made. They phrased those issues in the form of a series of questions. Those questions are presented below, in the order in which the users group developed them.

1. Will all individuals and facilities using the system have access to the data of every other individual and facility using it?

2. What additional modules of the EPOCH system might NOAA decide to purchase?

3. What approach will be taken to the training of users at the facilities that will take part in the pilot testing of the system?

4. What individuals at the facilities at which the pilot tests will be conducted will be trained during Phase 2 of the project?

5. Which fields will the system, as implemented by NOAA , require be populated?

6. What types of tank should be specified and how will the classification of such tanks be tracked?

7. Should the system include more types of transaction?

8. What procedures for temporary storage of chemicals should be adopted?

9. How will waste handling at satellite accumulation sites be tracked?

10. Where will MSDSs be stored?

When the members of the users group had completed the list of outstanding issues, the users group adjourned for the day.

4.0 THURSDAY, OCTOBER 2, 1997

During the session on Thursday, October 2, the group discussed test scenarios to be used in testing the CIMS system. Through their discussion, the members identified a number of scenarios to be included in the testing. Those scenarios are presented below.

Application scenarios

1. Make the user determine whether to track an office product by chemical or by content.

2. Conduct of an audit through the use of a bar code reader.

3. Track a consumable material that is moved from location to the next.

4. Track a drum of ethanol that is moved from the laboratory to the field and returned partly as pure product and partly as waste, whether in the same or different containers.

5. Generate a Tier 2 report.

6. Generate a report that shows, by facility, the number, contents, and sizes of tanks in each RECO region.

7. Track the portion of a chemical that is moved from one location to another and then used to generate a recipe.

8. Notify the system administrator, as well as the RECO and LECO, when an attempt is made to store incompatible materials adjacent to one another (interface with NOAA incompatibility software).

9. Track a chemical that was purchased in a foreign port.

10. Generate a report, by RECO regions and by facility, how much of a given chemical was purchased and used and how that amount was consumed.

11. Generate a report for a landlord that indicates the kinds and amounts of chemicals each of the landlord' s tenants is purchasing and using.

12. Export data from the CIMS database to a geographic information system (GIS) database.

13. Reconcile inconsistencies between information in the database and the contents of a reused container when the database was not updated at the time of reuse.

14. Track the interaction between a hub facility and its satellites, including inventory, reporting, and maintenance of MSDSs.

15. Test dial-in capability for entering data into the hub local area network (LAN).

16. Track chemicals coming to the laboratory or ship from an outside source.

17. Track the temporary storage of chemicals in laboratories or warehouses and on ships.

18. Track the generation of a recipe for which the database shows one of the recipe component's quantity is zero.

19. Track the dumping of chemicals into temporary storage containers before they are transferred to waste containers.

20. Track the material disposed of in each waste container using the bar code labeling system.

21. Track a number of similar products that are distributed under a variety of brand names.

22. Download an updated master file.

23. Enter a restricted chemical into the system and notify the RECO, the LECO, and the system administrator.

24. Handle information sent to the wide area network (WAN) by a user that is not on the LAN.

25. Test hardware and modem connections.

26. Print MSDSs.

27. Download bar code data to the database.

28. Print bar code labels.

29. Download information from the master file to a ship.

30. Generate an ad hoc report.

31. Conduct an inventory using the bar code scanner and uploading the data in to the database.

Once discussion of test scenarios had been concluded, Mr. Hunt provided the members of the users group with a presentation on the process by which the CIMS would be evaluated during the pilot test. Mr. Hunt identified three areas to be evaluated: SOPs for data entry and the associate quick reference guide, training, and software. Among the factors that would be considered in the evaluation Mr. Hunt included speed, effectiveness in completing tasks involved in the various

scenarios to be tested, "user friendliness" or ease of use, and ease of generating ad hoc reports. The ultimate question, Mr. Hunt indicated, would be, "Will the system help users ensure compliance?". When Mr. Hunt had completed his presentation, the members of the users group discussed and agreed upon the agenda for their next meeting, including sources of MSDS information, preparation of SOPs, training procedures, and establishing the data fields that the users will be required to enter into the database. The first meeting of the CIMS users group then was adjourned.

Chemical Inventory Management System (CIMS) Users Group

Meeting Minutes

October 28, 1997

Silver Spring, Maryland

Prepared for:

National Oceanic and Atmospheric Administration

Contract No. 50WCNA506093

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CONTENTS

1.0 INTRODUCTION

The Chemical Inventory Management System (CIMS) Users Group of the National Oceanic and Atmospheric Administration (NOAA) held its second meeting October 28 through October 29, 1997, at NOAA's headquarters offices in Silver Spring, Maryland. The objectives of the meeting were to:

- √ Report on the status of the letter to NOAA management stressing the importance of the participation of the members of the CIMS Users Group in the CIMS Initiative, CIMS Phase 2 and 3 funding, and the preparation of information about CIMS to be added to the Environmental Compliance Staff (ECS) home page
- √ Refresh the memories of the participants about the structure of the database
- √ Determine how the material safety data sheet (MSDS) module will be populated
- √ Discuss issues related to the claiming by NOAA of ownership of other entities' chemicals
- √ Understand and make decisions about issues related to bar coding
  - Select the size and type of paper the bar code will be printed on
  - Determine the type of bar coding hardware and software to be used at NOAA's facilities
- √ Discuss issues related to the selection of chemicals to be excluded from tracking
- √ Discuss and revise flow charts
- √ Determine which fields in the chemical master file will be populated
- √ Discuss issues related to training and determine the best method for training NOAA staff
- √ Discuss scenarios for entering data at the facility level
- √ Discuss the potential tracking of medical and biological products
- √ Determine newsletters to which article will be submitted and what information will be included in the article
- √ Review procedures for submitting travel vouchers
- √ Schedule the next meeting

During the meeting, the group discussed scenarios or considered problems that might occur in real-life situations in using the inventory system and the need to define which chemicals should be exempt and not exempt from tracking. The group also discussed populating the facility and chemical master file fields in the database and purchasing an MSDS CD-ROM software package. Finally, the training of CIMS users and the preparation of an article on CIMS for Department of Commerce and NOAA newsletters were discussed.

Representatives of each of the line and staff offices, as well as two of the administration's regional environmental compliance officers (RECO), make up the users group and were present at the second meeting of the group. Those individuals are:

- Ms. Lynnette Ansell, Eastern Administrative Support Center (EASC) RECO
- Ms. Jean Durosko, alternate to Mr. Nir Barnea, National Ocean Service (NOS)
- Ms. Barbara Jobe, National Marine Fisheries Service (NMFS)
- Mr. Ken Jones, Oceanic and Atmospheric Research (OAR)
- Ms. Kristin Kniskern, National Environmental Satellite, Data, and Information Service (NESDIS)
- Mr. Jim Schell, Office of NOAA corporate Operations (ONCO)
- Mr. Minh Trinh, Western Administrative Support Center (WASC) RECO
- Mr. Jeff Walker, EG&G, representing the National Weather Service (NWS)

Also present during the meeting were Ms. Sue Kennedy, the director of NOAA's Environmental Compliance Staff, who, on the first day of the meeting, discussed issues related to the letter promoting participation of members of the group in the CIMS Initiative, funding, and the CIMS addition to the ECS home page; and Ms. Deborah Albert, Mr. Bryan Smith, and Mr. Dan Barone of Tetra Tech EM Inc. (Tetra Tech), the contractor supporting NOAA's CIMS Initiative.

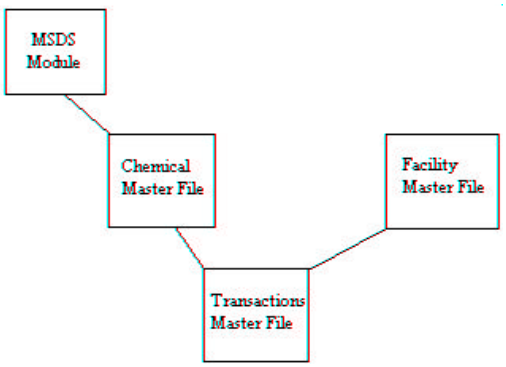
The following sections present summaries of the proceedings of the meeting in chronological order.

2.0 TUESDAY, OCTOBER 28, 1997

The first day of the meeting began with Ms. Kennedy's discussion of the letter to be sent to NOAA upper management promoting the participation of members of the users group in the CIMS Initiative. Ms. Kennedy reported that NOAA's Office of Finance and Administration (OFA) had promised to fund the CIMS Initiative and that Deputy Under Secretary of Commerce Bill Mehuron, after meeting with Ms. Kennedy, had said that he would support the initiative as well. Assuming national implementation of CIMS (Phase 3) will occur at 500 NOAA facilities, the preliminary cost estimate would be $1.7 million through fiscal year (FY) 2000. Ms. Kennedy also reported that home page contact information for a few more administrators would be needed before CIMS can be incorporated into the ECS section of NOAA's home page. Finally, Ms. Kennedy stated that Logical Data Systems, Inc. (LDS) was to make a presentation on the EPOCH software at NOAA's next Facilities Council Meeting. From this discussion, the members recognized the need that NOAA:

- ✓ Determine by December 1998 the budget amounts needed to fund Phase 3 in FY 2000
- ✓ Develop a method of accounting for cost savings

Mr. Trinh and Ms. Albert briefly reviewed the database setup for EPOCH. Information stored in the chemical master file, which contains information about chemical properties, and the facility master file, which contains information about the locations at which containers of chemicals are stored, is used to track transfers in the transactions master file. The MSDS module works with the CMF and stores information provided on MSDSs:



Mr. Smith then discussed the criteria that were used to select the most appropriate MSDS software package for use in populating the MSDS module, including total number of MSDSs it contains, the manufacturers represented (principally Sigma-Aldrich, J.T. Baker, and Fisher), and price. On the basis of discussion, the group decided that:

- ✓ A CD-ROM package by FastSearch Corporation would be the best way to populate the MSDS module of EPOCH
- ✓ Members will ask the staff of their facilities whether they can recommend a better CD-ROM than FastSearch

After the discussion of the MSDS module, Ms. Albert asked members of the users group to read minutes of the conference call of the Chemical Ownership Focus Group held on October 15, 1997. That group' s discussion centered on the transfer of ownership of hazardous chemicals. The members of the users group then discussed several scenarios related to ownership and liability

issues, including the establishment of a standard contract for scientists who bring chemicals to a NOAA facility or onto a NOAA vessel; the addition of health and safety language to the contract; and effective communication to field personnel of the requirements for transfer of ownership of the chemicals. The members agreed to the following action:

- ✓ A focus group will be formed to draft contractual language for contractors who bring chemicals to a NOAA site; the focus group also will examine issues related to chemicals that are brought to such a site by an outside entity under:

    a. Grants
    b. Memoranda of understanding (MOU)
    c. Lease agreements

Before recessing for lunch, the members of the users group discussed chemicals that may and may not be exempt, under various environmental laws and regulations, from requirements for reporting or tracking. Under the Emergency Planning and Community Right-to-Know Act (EPCRA), Sections 311 and 312, facilities must provide information about their chemical storage practices to state and local agencies, including the local fire department. Further, the identified facilities must provide MSDSs and an annual inventory of chemicals on hand. Specifically exempted from those requirements are:

32. Chemicals that do not require an MSDS, as identified under 29 Code of Federal Regulations (CFR) Section 1910.1200(b)(6)

33. Consumer products or hazardous substances, as defined under the Consumer Product Safety Act, when the employer can demonstrate that use and exposure to these substances are the same as that experienced by the consumer

34. Medical and research laboratory materials

35. Chemicals being transported or being distributed or stored incident to transportation

Under Section 313 of EPCRA, facilities that process, manufacture, or otherwise use certain toxic chemicals in quantities greater than applicable thresholds must report annually to the EPA and to state officials the total amount of releases to all media. Exempted from those requirements are:

1. Substances that are not considered hazardous if released under normal conditions or used or processed at the facility

2. Substances used in janitorial or other custodial or plant and grounds maintenance, such as cleaning supplies, fertilizers, and pesticides

3. Substances kept for personal use by employees, including items used or sold in stores, cafeterias, and infirmaries

4. Substances used in maintenance of motor vehicles

5. Substances used in research and development activities

The members' discussion revealed the following unresolved issues:

- ✓ The need to develop a method of tracking MSDSs that are not included in CD-ROM package purchased;

  Possible solutions to this issue include

  1. Obtaining the information from the MSDS on-line search service of the Northwestern Fisheries Science Center, or

  2. Requiring that facilities keep hard copies of the MSDSs

- ✓ The need to determine the tracking requirements established under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Toxic Substances Control Act (TSCA), Title 5 of the Clean Air Act (CAA), and section (cc) of the Resource Conservation and Recovery Act (RCRA)
- ✓ The need to determine whether to track biological chemicals
- ✓ The need to determine whether boilers and large quantity generators (LQG) are to be tracked
- ✓ The need to determine how to track chemicals being returned to NOAA facilities
- ✓ The need to develop protocols to ensure that chemicals purchased abroad are in compliance regulations under TSCA
- ✓ Need to determine whether ships (vessels) are exempt under EPCRA
- ✓ Need to determine whether aboveground storage tanks (ASTs) and underground storage tanks (USTs) must be tracked
- ✓ Need to determine whether gas cylinders must be tracked
- ✓ Need to prepare a position paper that outlines NOAA's understanding of the various exemptions and how they affect NOAA's chemical tracking procedures

After members of the users group concluded their discussion of chemical exemptions, Mr. Walker suggested that the group should ask EPA and other appropriate agencies to review and provide concurrence on the position paper. The group agreed that upper management of NOAA should review and approve the position paper before it is submitted to other federal agencies. The members then agreed to the following actions:

- ✓ CIMS will not merely meet, but exceed, federal tracking requirements for chemicals
- ✓ A section will be added to NOAA's standard operating procedures (SOP) to address the purchase of chemicals abroad and the tracking of chemicals on trips to remote areas

- ✓ Links to other home pages that include information about federal regulations governing the tracking of chemicals will be incorporated into the CIMS home page
- ✓ Users Group meeting minutes will be posted on the CIMS home page
- ✓ Ms. Albert will work with Mr. Roy McCullough of the Occupational Health Division of NOAA and Mr. Nir Barnea of the National Ocean Service to prepare a position paper on chemicals exempt from tracking or reporting under EPCRA; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and other environmental and safety laws and regulations, submit the paper to NOAA counsel, and then submit the paper to another federal agency, such as EPA, for concurrence

The users group then discussed the various types of bar code scanners and size and type of paper for labels that might be used in the inventory. The group concluded that the portable bar code reader, an integrated laser model that can download and upload information into a computer, would be the best option. The portable readers, although higher in price than keyboard wedge bar code readers, would be easier to use because they have a longer scanning range. Members of the group agreed to the following decisions:

- ✓ Portable bar code readers will be used to conduct the inventory
- ✓ Because it is versatile and strong, polyester paper will be used for bar code labels
- ✓ To ensure NOAA obtains the best bulk rate for the bar code readers, NOAA headquarters will obtain a request from each facility for the number of devices needed, then order the total number

Finally, the members of the users group examined flow charts that graphically present three processes performed to maintain the CIMS: flow of data between facilities and the central administrator, maintenance of the chemical master file and dissemination of information, and the process of updating NOAA's central server transaction file each month. After the group discussed the flow charts, Ms. Albert asked for suggestions about other processes included in the SOP user's manual that would benefit from such graphic presentation. Mr. Walker suggested that the bar-coding process be depicted in a flow chart to reinforce understanding. After their discussion of the flow charts, the group adjourned for the day.

3.0 WEDNESDAY, OCTOBER 29, 1997

On the second and final day of the meeting the users group discussed which master file fields should be populated and considered issues related to training as well.

The group agreed that the following fields in the CMF will be populated:

- Chemical name (CHEM_NAME)
- Pure or mixture (PURE_MIXTURE)
- Physical state (liquid, solid, gas, or unknown) (PHYSICAL_ST)
- Chemical abstract service (CAS) number (CAS_NUMBER)
- Specific gravity (DENSITY)
- Print on Tier 2 report (HAZARD_CHEM)
- Reportable quantity (REPORT_QTY)
- Threshold quantity (THRESH_QTY)
- Chemical category (CHEM_CAT)
- Chemical status (CHEM_STAT)
- Open Field 1 (CHM_OPEN1)
- Open Field 2 (CHM_OPEN2)
- EPA identification number (EPA_ID_1 through EPA_ID_6)
- Trade secret (TRADE_SECRET)
- EPA hazard category
    - Flammable (FLAMMABLE)
    - Sudden release of pressure (SUD_REL_PRES)
    - Reactive (REACTIVE)
    - Acute health hazard (ACUTE)
    - Chronic health hazard (CHRONIC)
    - Unknown hazard (UNKNOWN_HAZ)
    - No known hazard (NONE_HAZARD)

- Hazard classification code (HAZARD_CLASS)
- California waste class
    - Toxic (W_TOXIC)
    - Ignitable (W_IGNITABLE)
    - Corrosive (W_CORROSIVE)
    - Reactive (W_REACTIVE)
    - Extremely hazardous (W_EXTRE_HAZ)
    - Waste code (W_CODE)
- U.S. Department of Transportation (DOT) shipping name (DOT_SHIPNAME)
- National Fire Protection Association (NFPA) hazard
    - Flame hazard (NFPA_FLAME)
    - Health hazard (NFPA_HEALTH)
    - Reactant hazard (NFPA_REACT)
    - Water hazard (NFPA_WATER)
    - Oxidation hazard (NFPA_OXI)
    - Corrosive hazard (NFPA_CORR)
    - Radiation hazard (NFPA_RAD)
    - Generic group code used for reporting trade secrets (GENERIC_CODE)
- Generic group name used for reporting trade secrets (GENERIC_NAME)
- Date of issuance of the MSDS (MSDS_DATE)
- Vendor identification (VENDOR_ID)
- Chemical component that is part of the standard chemical mixture (COMPONENT)
- Lower percent or ingredient amount (FROM_PERCENT)
- Upper percent amount (TO_PERCENT)
- Ingredient unit of measure (COMP_UNITS)

The fields that record information that is not required for any reports and in which information therefore should not be entered are:

- MSDS identification number (MSDS_ID_NUM)
- United Nations (UN) number (UN_NUMBER)
- Molecular weight (MOLE_WEIGHT)
- Vapor pressure (VAPOR_PRES)
- Vapor indicator (VAPOR_IND)
- Boiling point (BOIL_POINT)
- Method of waste treatment (WASTE_TREAT)
- Radioactive curies (RADIO_CURIES)
- Recommended disposal method (DISP_METHOD)
- Description of the chemical (CHEM_DESCR)

Fields for which further evaluation is necessary to determine whether or not they should be populated are:

- Percent emissions of volatile organic compounds (VOC)
- Actual pounds of VOC emissions per gallon of substance (ACT_VOC_SOL)
- Allowable pounds of VOC emissions per gallon of solids (ALL_VOC_SOL)
- Actual pounds of VOC per gallon of coating, minus water (ACT_VOC_CTMW)
- Volume percent of solids (VOL_PCT_SOL)
- Film weight of chemical when chemical is sprayed on a sheet (FILM_WEIGHT)
- Threshold planning quantity for the chemical (LIST_TPQ)

The fields that record information that is populated by the software and therefore do not require manual entry are:

- Is the material a toxic chemical (TOXIC_CHEM)
- Is the material extremely hazardous (EXTRE_HAZ)
- Is the material on the CERCLA list (CERCLA_CHEM)
- Date stamp showing the last date on which the record was updated (UPDATE_DATE)
- The chemical list master file list number (CHEM_LIST)

The group also decided that:

- ✓ To differentiate between general mixtures like paint, the chemical name will include the brand name or name of the vendor
- ✓ The software will be modified to include a field for shelf life of the chemical

In their discussion of the facility master file, the members of the users group agreed to the following decisions:

- ✓ Data will be entered in all fields, except acreage, average temperature, atmospheric pressure, and wind velocity
- ✓ Must determine system for establishing the facility identification number and facility name
- ✓ The facility description will be a specific group at the facility or the nature of the facility (such as a laboratory or weather station)
- ✓ The owner name will be "U.S. DOC NOAA" if NOAA owns the facility, otherwise, the name of the owner will be entered
- ✓ The telephone number of the owner will be number of the highest ranking official or the number of the outside entity that owns the facility
- ✓ The facility manager will be considered the highest ranking official at the facility
- ✓ The group identification will be the regional RECO, and E, W, C, M, or H will be used to distinguish among east, west, central, mountain, or headquarters, respectively
- ✓ Emergency contact number 1 will be the facility emergency coordinator
- ✓ Emergency contact number 2 will be the alternate emergency contact at the facility or a safety and environmental compliance officer (SECO), the line office environmental compliance officer (LECO), or the RECO, if there is no alternate at the facility
- ✓ The internal telephone number will be the work number of the individual; the external number will be the home or pager number

- ✓ Open field number 1 will be the RECO, with telephone number
- ✓ Open field number 2 will be the SECO, with telephone number
- ✓ For many facilities the state identification for manifest field will be left blank
- ✓ The underground injection well code (UIC), Toxic Chemical Release Report (TCRR) identification number, and Dun and Bradstreet number by which the facility is listed by will be entered because they are required on Form R
- ✓ Tetra Tech will communicate to LDS that NOAA would like to add space to enter a voice mail number and an electronic mail address, and increase the character length for the name and address of the facility

After discussion of the populating of the fields in the chemical master file, the members discussed ways to address issues related to tracking chemicals at warehouses and sanctuaries. The members of the group decided that:

1. Because most sanctuaries, like Olympic Coast, store small amounts of fuel and perform little maintenance on equipment, sanctuaries will use a spreadsheet for performing inventories and send the sheet to their larger "hub" facilities

2. Chemicals in warehouses awaiting transport to a facility or vessel need not be tracked because they are not considered in determining a facility's threshold amount

3. Equipment and machinery that contain chemicals need not be tracked because they are a part of the structure (for example, the Office of Atmospheric Research has machinery that contains freon).

4. Chemicals stored at small stations like those of the National Weather Service must be tracked in some way.

Mr. Dan Barone of Tetra Tech then made a presentation on the training of CIMS users. Members of the users group made several decisions concerning the training sessions and training protocol:

1. The first training session will be a "dry run" to be held in Kansas City at NOAA's National Reconditioning Center (NRC) or in Silver Spring, Maryland, tentatively during the week of February 9, 1998 or of February 16, 1998

2. Training sessions for staff of the pilot facilities will be held concurrently at NOAA's Western Regional Center (WRC) in Seattle, Washington, and at the National Marine Fisheries Service in Charleston, South Carolina, tentatively during the week of

February 16, 1998 or of February 23, 1998

3. Training will be offered by region, and only the systems administrator will be trained

4. Members of the users group will attend one of the pilot facility training sessions

5. The SOPs will be used to conduct the training sessions

6. Information about the proper use and maintenance of bar code scanners will be added to the training program

7. After the CIMS has been installed at each NOAA facility, the environmental compliance officer at each site will train the facility' s personnel

After discussing the training, members of the group agreed to the following meeting schedule :

1. **December 16, 1997** and **December 17, 1997** to review chemical transaction scenarios
2. **January 20, 1998** and **January 21, 1998** to review SOPs

Ms. Barbara Jobe presented a scenario for data entry at a facility: If a new chemical comes into a facility when the site' s area safety representative (systems administrator) is not available to track the chemical, who will be responsible for that task? Ms. Albert responded that a back-up person should be available to handle the situation and ensure that the chemical will be entered into the database. The group considered such a situation a management issue, that such problems should be handled at the facility level.

The next topic discussed by the members was the format for articles to be placed in NOAA newsletters. The members of the group agreed on the following details:

1. The article will be sent to Department of Commerce, the *NOAA Report*, the NWS *Aware* and other NWS newsletters

2. The first article, to be released in December 1997, will summarize all important activities related to implementation of the CIMS

3. The second article, to be released in January 1998, will outline the task of the users group; include quotes from line office coordinators and other upper management personnel in NOAA; and discuss training logistics, the Information Technology Management Reform Act (ITMRA), and the current status of CIMS

4. The third article, to be released in February 1998, will describe the status of the pilot facilities and the CIMS pilot testing

5. The fourth article, to be released in March 1998, will describe nationwide implementation and the future of the CIMS

Ms. Ansell then presented the final issue to be discussed during the meeting, travel vouchers. She identified the code to be used for vouchers, **8AJ0510^QP4EEV^32**, and explained that a copy of the voucher must be submitted to Captain Donald Suloff of NOAA's Environmental Compliance Staff through Ms. Albert, while the original voucher must be forwarded to the Financial Management Center (FMC). Ms. Albert then asked each group member to report the total hours they had spent on CIMS. Those matters having been presented, the meeting was adjourned.

Chemical Inventory Management System (CIMS) Users Group

Meeting Minutes

December 16, 1997

Silver Spring, Maryland

Prepared for:

National Oceanic and Atmospheric Administration

Contract No. 50WCNA506093

Work Assignment No. 011

December 30, 1997

CONTENTS

1.0 INTRODUCTION

The Chemical Inventory Management System (CIMS) Users Group of the National Oceanic and Atmospheric Administration (NOAA) held its third meeting December 16 through December 17, 1997, at NOAA's headquarters offices in Silver Spring, Maryland. The objectives of the meeting were to:

- √ Understand the status of the CIMS Initiative
- √ Understand the Chemical Transactions Master File
- √ Discuss and prepare the final list of modifications to the software
- √ View a demonstration of the chemical reactivity software
- √ Discuss incorporation of the chemical reactivity software in to the CIMS software
- √ Resolve outstanding issues related to the master files
- √ Complete the list of test case scenarios
- √ Discuss issues related to training and identify the best method for training NOAA staff
- √ Discuss issues related to the exclusion of chemicals from tracking
- √ Discuss the schedule for the project
- √ Set the agenda for the next meeting

Representatives of each of the line and staff offices, as well as two of NOAA's administration's regional environmental compliance officers (RECO), make up the users group and were present at the third meeting of the group. Those individuals are:

- Mr. Nir Barnea, National Ocean Service (NOS)
- Mr. Bill Cunningham, alternate to Mr. Jim Schell, Office of NOAA Corporate Operations (ONCO)
- Ms. Jean Durosko, NOS
- Mr. Mike Francisco, alternate to Mr. Jim Schell, ONCO

- Mr. Mark George, Mountain Administrative Support Center (MASC) RECO
- Ms. Barbara Jobe, National Marine Fisheries Service (NMFS)
- Mr. Ken Jones, Oceanic and Atmospheric Research (OAR)
- Ms. Kristin Kniskern, National Environmental Satellite, Data, and Information Service (NESDIS)
- Mr. Roy McCullough, Occupational Safety and Health
- Ms. Laura Seabeneck, Southern Regional Environmental, Safety, and Health Compliance Officer, NMFS and NOS
- Mr. Minh Trinh, Western Administrative Support Center (WASC) RECO
- Mr. Jeff Walker, EG&G, representing the National Weather Service (NWS)

Also present during the meeting were Ms. Sue Kennedy, the director of NOAA's Environmental Compliance Staff, who, on the first day of the meeting, discussed issues related to (1) the letter that promoted participation of members of the group in the CIMS Initiative, (2) distribution to facilities of an official letter discussing the implementation of the CIMS Initiative, (3) funding for Phase 3 of the CIMS Initiative, and (4) relocation to NOAA's Boulder, Colorado facility; Ms. Deborah Albert, Mr. Michael Hunt, Mr. John Maher, Ms. Celeste Rutherford, and Ms. Krista Holloway of Tetra Tech EM Inc. (Tetra Tech), the contractor supporting NOAA's CIMS Initiative; Mr. Thai Mapp of Team Consultants, Inc.; and Mr. Bill Hope of Logical Data Solutions (LDS), Inc.

The following sections summarize the proceedings of the meeting and are presented in chronological order.

2.0 TUESDAY, OCTOBER 28, 1997

The first day of the meeting began with Ms. Kennedy' s discussion of the letter sent to NOAA upper management to promote the participation of members of the users group in the CIMS Initiative. After Dr. James Baker signed the letter, an article promoting the CIMS Initiative was submitted to the *NOAA Reporter* newsletter, she said. The article was not published in the December 1997 issue of the newsletter; however, it should appear in the January 1998 issue, she added. Ms. Kennedy also reported that she was trying to obtain funding for Phase 3 of the CIMS Initiative. In addition, Ms. Kennedy reported that the effort to relocate to the Boulder, Colorado facility is underway and she would like CIMS installed at the new site as early as possible. The facility would not be one of the pilot facilities, she noted, but instead would be a "real life" CIMS operating facility. Finally, Ms. Kennedy stated that staff of the smaller facilities are concerned that the CIMS Initiative will prove to be a burden on their time and resources. The members of the users group discussed several ways of distributing an official statement about the implementation of CIMS to all NOAA facilities, to address the concerns of the facilities. Through their discussion, the members identified the following two methods of delivery to be investigated further:

- ✓ A broadcast message through the electronic-mail (E-mail) system
- ✓ A fact sheet that can be sent to facility contacts who then would distribute it internally

Mr. Hope then provided a brief overview of the EPOCH software' s master files, including the three main modules, the Chemical Master File (CMF), the Facility Master File (FMF), and the Chemical Transaction Master File (CTMF). He then discussed the existing inventory methods and the new methods of implementing inventorying procedures that the members of the users group had discussed during the October meeting. Existing inventory methods include recording:

- Annual average and maximum amounts at a facility
- Aggregated quantities by room and amount of chemical
- Changes entered as plus or minus a specific quantity of a chemical
- Aggregated quantities by room, amount of chemical, and number of containers
- Changes entered as plus or minus a specific quantity in a container

The group decided that the method the least burdensome to the facilities was to track annual average and maximum amounts of a chemical used or stored at the facility. The other methods require too

much time to implement or do not meet the reporting requirements of NOAA, they agreed. The members also decided that implementation of inventorying procedures will include:

- Identifying each container by a unique number
- Supporting bar coding of containers
- Tracking the acquisition, use, movement, and disposal of containers

In their discussion of how best to implement the inventory method, the users group considered the required regulations and the standards NOAA should strive to implement through the CIMS, as well as realistic goals for the CIMS. Among the issues the group discussed were:

- Is it realistic to expect personnel to record the movement of a container from one facility to another?
- Should the software track movement of a container from one room to another in the same facility?
- How does a facility handle unreconciled containers?
- What specific items do regulations require must be tracked?

Ms. Albert noted that the Chemical Exemption Focus Group had prepared a position paper that identifies chemicals that would not be tracked in CIMS. The paper, she said, is to be submitted to NOAA' s legal counsel and then to the U.S. Environmental Protection Agency (EPA) for review and approval. A member of the group mentioned that some facilities would like to use the CIMS software to track inventory of consumer chemical supplies. Mr. Hope stated that EPOCH allows the user to exclude consumer chemicals from reporting. However, he stated, the tracking of consumer chemicals could place a tremendous burden on facilities. Through their discussion, the members decided that at first, the facilities should not use the CIMS software to track consumer chemical supplies; however, they agreed that the decision can be reviewed in the future on a case-by-case basis.

On the basis of their discussion about tracking the relocation of chemicals, the users group decided it might be too difficult for a facility to regularly track the relocation of containers from one room to another or from one area to another. Therefore, the group decided a container' s location in the facility also should be able to be updated only during the facility' s annual inventory. However, the system regularly will track:

- Incoming (either new or transferred from another facility)
- Outgoing (either disposed or transferred to another facility)

The users group also noted that a system of "checks and balances" is necessary for containers that are being transferred to other facilities. Otherwise, a user could convert the status of a container from unreconciled to relocated without confirmation. The group decided that fields indicating "Pending" and "Accepted" status should be added to CIMS. A container's record in CIMS, then could be tagged by the sending facility as relocated to another facility; however, the transaction would not be completed until the receiving facility confirmed receipt of the container. In addition, they decided, a "Discrepancy" field should be added so the user can note any problems related to the shipment. EPOCH will be modified so that it alerts the sender if the receiver enters information in the discrepancy field.

The group discussed the various other features they would like to have incorporated into EPOCH, including:

- ✓ Automating the entry of similar consecutive entries (the user would be able to enter the total number of similar containers received, and the CIMS software would generate that number of new records; eliminating the need for retyping information)
- ✓ Tracking current and prior locations of containers
- ✓ Adding "Pending Receipt" and "Receipt Accepted" fields, as well as a "Discrepancy" field
- ✓ Tracking disposition of containers (It was determined that a recycled container must have a new bar code and that a field will be added to track a recycled container' s new bar code together with the old bar code.)

Mr. George noted that bar codes cannot be placed on gas containers because the facility does not own those containers and the vendor removes and replenishes them. The users group decided that bar code labels for specific gases should be placed on a clipboard or on a wall and that the "Total Number of Containers" field in the CIMS should be updated each time a new shipment arrives. The group also agreed that the operation could be preformed on the loading dock.

The group discussed the following transaction types that are needed for the CIMS software:

- ✓ Add to Inventory (New Container) or Renumber (for labels that have been damaged and must be replaced)
- ✓ Increase Inventory (Add Increment)
- ✓ Decrease Inventory (Subtract Increment)
- ✓ Set Balance to a Specific Value (manual override)
- ✓ Set Balance to Zero
- ✓ Dispose of Container
- ✓ Issue Container from Inventory
- ✓ Return Container to Inventory
- ✓ Transfer Container to Another Facility (Pending Receipt or Receipt Confirmed)
- ✓ Accept Container from Another Facility
- ✓ Return to Vendor
- ✓ Dispose of and Recycle

The group discussed the following status types that are needed for the CIMS software:

- ✓ New to Facility
- ✓ Transferred In
- ✓ Unaccounted for
- ✓ Disposed of

Mr. Hope suggested that bar code labels be printed professionally. He stated that users who print their own labels may encounter problems related to print clarity that can hinder a scanner' s ability to read the bar code properly. Ms. Albert said the group would consider further whether to purchase preprinted labels or to allow facilities to print their own labels. Mr. Hope also demonstrated a program titled "AnyLabel" (a shareware software), which allows a user to generate and print bar code labels.

Ms. Albert distributed copies of a list of issues related to customization of the software for the users group to discuss and finalize. The group agreed that the following customizations should be incorporated into the CIMS software:

- ✓ Add to all screens that present the pick list of facility identifications **(FACILITY_ID)**, such as those in the report and tools folders, the respective facility names **(FACILITY_NAM)**. The pop-up box will be seen only by persons who have access to every facility' s data.

- ✓ Add to the **Facility Maintenance -- Update Facility Data -- Page 1** more characters in the facility name **(FACILITY_NAM)** field; the field is currently 25 characters in length and should be increased by at least 15 characters, preferably by 20 characters.

- ✓ Add to the **Facility Maintenance -- Update Facility Data -- Page 1** more characters in the facility street **(STREET)** address and owner street **(STREET_MAIL)** address fields; the fields are currently 25 characters in length and should be increased by at least 10 characters, preferably by 15 characters.

- ✓ Add to the **Facility Maintenance -- Update Facility Data -- Page 1 and 2** a field at least four characters in length, titled **Extension**, for the emergency contact 1 and 2 work **(WORK_PHONE_1), (WORK_PHONE_2)** and external **(EXT_PHONE1) (EXT_PHONE2)** telephone numbers, as well as the for the technical **(TECH_PHONE)** and public **(PUBL_PHONE)** contact telephone numbers.

- ✓ Add to the **Facility Maintenance -- Update Area Data** screen a field at least six characters in length titled **Permissible Storage Capacity Area** and **Permissible Storage Capacity Subarea** for tracking the storage capacity of an area, as well as the

storage capacity of a subarea. Data will be entered in gallons.

- ✓ Add a new interface to the **Calendar Module** that will compare the storage capacity of an area or subarea with existing inventory in that area or subarea and notify the appropriate personnel by e-mail when the inventory is equal to or greater than a capacity amount specified by the user.

- ✓ Create the **Chemical Inventory Container Tracking Module**, with screens that allow the user to track chemical containers (change the focus from tracking by chemical to tracking by container).

- ✓ Add the capacity to write a report that lists all containers in inventory at a facility, by area and subarea, and by status.

- ✓ Add the capacity to write a report that lists the life history of a specific container.

- ✓ Add the capacity to write a report that identifies chemicals from a selected chemical list and their respective totals stored in a facility, in an area, and in a subarea.

- ✓ Add the capacity to write a report that lists the containers in inventory at a facility, by area and subarea, that contain a chemical in its pure form and in mixtures, recipes, and kits.

- ✓ Add the capacity to track all the chemicals on the list of carcinogenic material developed by the International Agency for Research on Cancer (IARC).

- ✓ Add the capacity to track all of the chemical names and threshold quantities, as required under section 112(r) of the Clean Air Act.

The group agreed that the following customization should not be incorporated into the CIMS:

- ✓ Gray out and create drop-down (or pop-up) boxes presenting pick lists for the Division **(DIVISION_ID)** and Group **(GROUP_ID)** identification fields in the **Facility Maintenance -- Update Facility Data -- Page 1** window of the Facility Master File.

The group decided that further review of the following customizations is necessary:

- ✓ Add the capacity to write a report that lists, by chemical and by facility, the amounts of chemicals designated by EPA to be acutely and chronically hazardous that are present in a facility.

- ✓ Add the capacity to write a report that lists, for each chemical selected for shipment, the proper packaging requirements and shipping methods.

- ✓ Add the capacity to track all of the chemicals present at a facility that are subject to labeling requirements under the Toxic Substances Act of 1976 (45 Federal Register 42,854.)

Mr. Barnea made the last presentation for the day; he demonstrated the Chemical Reactivity software. The group discussed incorporation of the software into EPOCH during Phase 3. Several members of the users group made the following comments related to the incorporation of the software:

- ✓ The software could notify the systems administrator and users at a facility if incompatible chemicals are stored together, creating a hazardous condition
- ✓ A report could be generated that would compare the chemicals in a subarea and notify the user of possible hazards

Users must enter the chemical name accurately, since some solutions may contain the chemical in a diluted form and the chemical therefore would not be incompatible with other chemicals. However, if the user were to enter the solution as a pure chemical, the system may notify the user of an incompatibility that does not exist. Further, NOAA already is funding future changes in the Chemical Reactivity software, and the users group members should consider whether incorporation of the software should be delayed until the updates have been completed.

The group concluded that Tetra Tech will contact Dr. Jim Farr, of NOS, creator of the Chemical Reactivity software, and review the software further to determine whether it should be incorporated into the CIMS software package, and report the findings to the users group. After the discussion of the Chemical Reactivity software, the group adjourned for the day.

3.0 WEDNESDAY, OCTOBER 29, 1997

On the second and final day of the meeting, the users group discussed which master file fields should be populated and considered issues related to training, as well. Ms. Albert distributed copies of the list of chemical master file fields for the users group to review. Mr. Hope noted that users of the software will not change the information in the master files, but will use it in reports.

The group asked that the following fields, which previously had been considered for exclusion from tracking, be kept or added:

- Vapor pressure (VARPOR_PRES)
- United Nations number (UN_NUMBER)
- California waste classes
- Percent emissions of volatile organic compounds (VOC)
- Longitude
- Latitude

Next, Mr. Hunt provided an overview and status report on the installation of the software. Mr. Hunt said he had met with Mr. Robert Swisher of NOAA's Landover, Maryland office to discusses the possibility that the wide area network (WAN) server could house the EPOCH software and associated Oracle database. The database serves as a storage place for data that are processed through the CIMS. Having the database centrally located on that server, would provided the following features:

- ✓ Data could be entered and retrieved in realtime from a single system in a central location, eliminating the need for facilities to send updates to a central location to be uploaded to the main system
- ✓ Any facility connected to NOAA's WAN would have access to the data through CIMS, and other facilities and ships would have dial-up access through a modem
- ✓ A facility's computers would require only a minimum of free disk space (enough to load the CIMS), less maintenance would be required for the data base administrators (DBA) than if the software were installed at the facility, and the facilities would not have to preform data backups of their information
- ✓ Any number of users can have simultaneous access to the CIMS from their office's local area network (LAN), or it can be installed directly on individual computers. Mr. Hunt recommend that the system be installed on a LAN so that updates can be performed once, rather than for each computer

After Mr. Hunt's presentation, Ms. Albert provided copies of the NOAA Environmental Compliance Audit Schedule to the users group. She explained that the schedule will help identify existing NOAA facilities for inclusion in the Phase 3 implementation. Ms. Albert then asked the group to review the

list to identify any facilities that should be added to it.

Next, Mr. Hope reviewed LDS' s Material Safety Data Sheet (MSDS) Module. Any MSDS in ASCII format can be loaded into the module, he pointed out, noting that all facilities would have access to MSDS information The module, he added, also provides a report that presents the MSDS for each chemical in a facility or laboratory, and a help menu that can be customized to meet a facilities needs. Tetra Tech will research the possibility of obtaining a digital library of MSDSs that then can be loaded into the EPOCH MSDS module. Ms. Albert stated that, if electronic MSDSs are available to everyone who must handle the chemicals, facilities need not provide paper copies.

Ms. Albert then distributed scenarios for the pilot test to members of the users group. The group agreed that the scenarios should be grouped in to three categories; tracking, reporting, and hardware and software requirements. The group also agreed that training participants should master the following tasks:

- **Tracking**
  - Determine whether an office product and a consumer product should be tracked
  - Generate a recipe and decide whether it should be tracked
  - Reconcile inconsistencies in the Container Transaction Master File
  - Track the interaction between the Pacific Marine Center (hub facility) and a ship (satellite facilities), including inventory and reporting
  - Set up container(s) called waste and use the bar code labeling system to track the material disposed of in each waste container
  - Enter information into the system inventory for a container found to have a bar code label that had not been entered
  - Track a drum of ethanol that is moved from the laboratory to the field and returned as partly pure product and partly waste
- **Reporting**
  - Generate a Tier 2 report
  - Generate a report that shows by facility, the number, contents, and sizes of tanks in each RECO region
  - Generate a report, by RECO regions and by facility, on the status of a given chemicals (that is, received, used, or disposed of)
  - Generate a report for a landlord that indicates the kinds and amounts of chemicals each tenant has disposed of or has on hand
  - Generate an ad hoc report

- **Hardware and Software Requirements**

  - Export a list of containers, by room, from the CIMS database into a file format selected by the user
  - Test dial-in capability for entering data into the WAN
  - Enter a restricted chemical into the inventory and notify the RECO, the LECO, and the system administrator
  - Test hardware and modem connections
  - Print MSDSs

The group agreed that the training participants should not perform following tasks:

  - Use a bar code reader to conduct an audit
  - Track a consumable material that is moved from one location to another
  - Track the portion of a chemical that is moved from one location to another and used to generate a recipe
  - Notify the system administrator, as well as the RECO and line office environmental compliance officer (LECO), when an attempt is made to store incompatible materials in areas adjacent to one another (interface with NOAA incompatibility software)
  - Track a chemical that was purchased in a foreign port
  - Track chemicals coming to the laboratory or ship from an outside source
  - Track the temporary storage of chemicals in laboratories or warehouses and on ships
  - Track the generation of a recipe for which the database shows one of the recipe component's quantity is zero
  - Track the dumping of chemicals into temporary storage containers before they are transferred to waste containers
  - Track a number of similar products that are distributed under a variety of brand names
  - Download an updated master file
  - Handle information sent to the WAN by a user that is not on the WAN
  - Download information from the master file to a ship
  - Use the bar code reader to conduct an inventory and upload the data to the database

Members of the users group offered the following additional comments and suggestions about the CIMS:

  - ✓ Provide standard operating procedures (SOP) in the form of help screens.
  - ✓ Provide a message screen that tells the user when an update of the CIMS is available.
  - ✓ Measure the benefits of the CIMS, quantifying the time saved in inventorying the data, as well as the accuracy of the data, by manually inventorying a subarea and inventorying that subarea again using the CIMS.

Ms. Holloway then discussed the design for the training course, including training time, methodology before the final decision is made on the software, methodology after the final decision is made on the

software, and other considerations related to the training. The users group decided that the following aspects of the training design require further consideration:

- ✓ Create a computerized tutorial for CD-Rom or the Internet
- ✓ Provide a check list of steps to be taken to implement CIMS
- ✓ Provide a quick-reference guide to the SOPs
- ✓ Provide to pilot facilities a preprinted sheet of bar codes to facilitate accuracy of testing and unity of data

The group added the following discussion topics to the course design:

- History
  - Benefits (time, accuracy, and knowledge)
  - Case studies
  - Development process for CIMS
  - Federal, state, and local requirements
- Policies
  - Special procedures (for example, the submittal of MSDS before the chemical is ordered, and procedures for moving a chemical from the facility to the field)
  - Roles and responsibilities (Systems Administrators compared with other users)
  - Technical support contacts

On the basis of the discussion of implementation of special purchasing procedures, the group decided to form a focus group to identify the best process for purchasing and receiving chemicals. In addition, members of the group made the following suggestions about the purchasing process:

- ✓ Disallow credit card orders of chemicals, thereby requiring the purchaser to place orders through the purchasing department
- ✓ Incorporate purchasing into CIMS, a procedure that also would provide the user an inventory check before ordering the new item

Mr. Hope demonstrated the purchasing module that LDS had designed. He explained that the purchaser

enters a new purchase order (PO); the PO is sent to the administrator who approves the purchase, sends it for review to the appropriate persons, or rejects the purchase. Ms. Albert agreed to discuss the issue of centralized purchasing with Ms. Kennedy; the focus group will recommend a purchasing process for review by NOAA.

After a brief discussion, Ms. Albert proposed the following schedule for training sessions for pilot facility contacts:

Site	**Date**
Kansas City, Kansas	February 9 or 17, 1998
Charleston, South Carolina	February 23, 1998
Seattle, Washington	February 23, 1998

Ms. Albert emphasized that the schedule depends on the amount of time LDS must have to modify the software, as well as the time required to prepare training materials on the new module.

Ms. Albert then distributed copies of a list of chemicals that will not be tracked in the CIMS and asked for comments from the users group by January 5, 1998. The approved list will be sent to NOAA' s lawyers and EPA for final approval.

Ms. Albert also distributed copies of a proposed approach to the preparation of a classification system for hazardous chemicals. The users group decided that it should not attempt to implement restrictions on purchases of chemicals classified as conditional or restricted. The group rather should emphasize the possible hazardous to users and suggest that facilities that have chemicals classified as conditional or restricted reevaluate the need for those chemicals. The group also suggested that the following classes of chemicals be added to the list:

- ✓ Biohazardous chemicals
- ✓ Radioactive chemicals
- ✓ Toxic wastes

Last, after a brief discussion, the next meeting of the users group was scheduled for January 21 and 22, 1998. The meeting was then adjourned.

Chemical Inventory Management System (CIMS) Users Group

Meeting Minutes

July 7 - 9, 1998

Silver Spring, Maryland

Prepared for:

National Oceanic and Atmospheric Administration

Contract No. 50WCNA506093

Work Assignment No. 011

August 7, 1998

CONTENTS

1.0 INTRODUCTION

The Chemical Information Management System (CIMS) Users Group of the National Oceanic and Atmospheric Administration (NOAA) held its fifth meeting July 7 through July 9, 1998, at NOAA's headquarters offices in Silver Spring, Maryland. The objectives of the meeting were to:

- √ Understand the status of the CIMS Initiative
- √ Understand the role the Systems Acquisition Office (SAO) will be playing in the program
- √ Discuss the results of the pilot test and come to consensus on the method of addressing the concerns of participant in the pilot testing
- √ Set priorities among the functional requirements of the system
- √ Produce a draft final version of the CIMS Strategic Plan matrix
- √ Produce a draft final version for legal counsel of the policies and procedures that were reviewed by the pilot facility
- √ Determine whether consumer products will be tracked
- √ Determine whether historical samples will be tracked
- √ Identify actions to be taken to publicize the CIMS Initiative and assign tasks to group members
- √ Comment on new policies and procedures prepared by members of the User Group so a draft version can be prepared for distribution to NOAA facilities
- √ Determine which activities will be funded under the remaining Phase 2 budget
- √ Determine which policies and procedures must be developed in Phase 2
- √ Present the progress and accomplishments of CIMS to NOAA management
- √ Discuss the schedule of the project
- √ Set the agenda for the next meeting

Representatives of each of the line and staff offices, and the NOAA administration's regional environmental compliance officers (RECO), which make up the users group, were present at the meeting. Those individuals are:

- Ms Lynnette Ansell, Eastern Administrative Support Center (EASC) RECO
- Mr. Bill Cunningham, alternate to Mr. Jim Schell, Office of NOAA Corps Operations (ONCO)
- Ms. Jean Durosko, National Ocean Service (NOS)
- Ms. Barbara Jobe, National Marine Fisheries Service (NMFS)
- Ms. Kristin Kniskern, National Environmental Satellite, Data, and Information Service (NESDIS)
- Mr. Roy McCullough, Occupational Safety and Health
- Mr. Bajinder Paul, SAO
- Mr. John Pierson, NMFS
- Ms. Laura Seabeneck, Southern Regional Environmental, Safety, and Health Compliance Officer, NMFS and NOS
- Ms. Rica Semones, Oceanic and Atmospheric Research (OAR)
- Mr. Jeff Walker, EG&G, representing the National Weather Service (NWS)

Several participants representing facilities at which the CIMS software was pilot tested also attended the meeting. Those individuals are:

- Mr. Doug Crawford, Command and Data Acquisition (CDA) Station, NESDIS
- Mr. Michael Farmer, Atlantic Oceanographic and Meteorological Laboratory (AOML), OAR
- Mr. Malcolm Hale, Charleston Laboratory, NMFS

- Ms. Diane Kapareiko, Milford Laboratory, NMFS
- Ms. Annette Kubinec, Northeast Fisheries Science Center, NMFS
- Mr. David Ulrich, Montlake Laboratory, NMFS (by telephone)

Also present during the meeting were Ms. Susan Kennedy, the director of NOAA' s Environmental Compliance Staff, who, on the first day of the meeting, discussed issues related to (1) funding of the CIMS Initiative, (2) the crucial role of the SAO group, (3) user participation, and (4) extension of the CIMS Initiative to outside entities; Ms. Deborah Albert and Ms. Celeste Rutherford, Tetra Tech EM Inc. (Tetra Tech), the contractor supporting NOAA' s CIMS Initiative; and Mr. Ty Mapp of Team Consulting, Inc.

The following sections summarize the proceedings of the meeting.

2.0 TUESDAY, JULY 7, 1998

On the first day of the meeting, the users group discussed several topics including the mission, goals, and objectives of the CIMS Initiative. Summarized below are the proceedings of the sessions held on Tuesday, July 7, 1998.

Welcome and Status of the CIMS Initiative

The first session of the meeting began with Ms. Kennedy' s discussion of funding for the CIMS Initiative. Ms. Kennedy reported that the Office of Finance and Administration (OFA) had agreed to fully fund Phase 2 of the initiative; however, she noted, it would be the responsibility of the line offices to fund Phase 3, the implementation of the initiative. She stressed the importance of ensuring that funding be included in the fiscal year (FY) 2000 line office budgets if it had not been included in the FY 1999 budgets. Ms. Kennedy assured the members that resources are available to assist them in determining those budget amounts. Specifically, Mr. Paul would help the line offices identify at which facilities the CIMS software should be implemented, she pointed out. Ms. Kennedy reemphasized the importance of SAO as a new member of the group and requested that the members make the best possible use of that resource.

A participant asked about the possibility that universities and other outside entities might use the CIMS system. Members of the user group pointed out that NOAA shares facilities with other entities, but that reporting to the U.S. Environmental Protection Agency (EPA) nevertheless must be done on an aggregate level. Ms. Kennedy agreed to extend CIMS to outside entities and asked that the group develop standard language for a memorandum of understanding (MOU) with outside entities.

Overview of the Systems Architecture Concept of Operations

Mr. Paul then provided an overview of the development of the environmental compliance enterprise architecture (ECEA). Mr. Paul first provided an overview of the background of that effort, defining the meaning and purpose of a target system architecture. He then discussed the ECEA process, including the preparation of a concept of operations and a context diagram. The process involves seven steps;

1) identifying strategic drivers and goals, 2) characterizing baseline conditions, 3) defining the target architecture, 4) identifying opportunities, 5) identifying migration options, 6) planning the implementation phase, and 7) updating and reviewing the system continually. Mr. Paul explained that the process is cyclical, with step 7 leading back to step 1.

Mr. Paul then described the current status of the project. Specifically, for each of the information technology (IT) initiatives, a draft report on the concept of operations had been prepared and submitted to SAO for review. The reports were to be available at the end of July for review by the users group, he said, and the information in the reports would be used to prepare the ECEA Concept of Operations Report to be completed by August 31, 1998. Mr. Paul gave an overview of the follow-up steps to be conducted, including formation of the architecture working group (AWG), achievement of consensus on the ECEA concept of operations document, completion of the baseline characterization, and development of the target architecture. Throughout his presentation, Mr. Paul stressed that involvement of the user group is integral to the ECEA process.

Discussion of the CIMS Strategy Mission, Goals, and Objectives

Ms. Albert then led a discussion of the CIMS strategic plan, and the group then worked to revised the existing matrix that defines the mission, goals, and objectives of the CIMS Initiative. The members of the users group first discussed whether the following materials should be tracked:

- Biological or infectious materials or wastes
- Radioactive materials or wastes.

The group decided that biological or infectious materials or wastes would not be tracked in CIMS because 1) there are no regulations that require tracking or reporting of such materials, 2) the wastes are autoclaved and therefore are not transferred off site, and 3) such wastes are not transferred to other locations and therefore do not require tracking to ensure that they are not placed improperly. The group decided, however, that radioactive materials should be tracked because they commonly are brought on board NOAA vessels and users must ensure their proper handling and placement.

The members of the users group then discussed the wording of the goals and objectives and identified policies and procedures to be developed (refer to Attachment A). Finally, the group decided to form several focus groups to address major issues, as follows:

- Disposal of hazardous wastes and unneeded materials before inventory is conducted (focus group members include Lynnette Ansell and Jeff Stefani)
- Evaluation of the usability of Computer-Aided Management of Emergency Operations (CAMEO) for CIMS users (focus group members include Lynnette Ansell, Mark George, Kristin Kniskern, Sherilyn Villegas, and Jeff Walker)
- Evaluation of CIMS data; a one-year audit to ensure that users are following proper procedures and to ensure that problems are effectively communicated to the central administrator (focus group members include Lynnette Ansell, Bajinder Paul, Frank Morado, and Jeff Walker)

Prioritization of User or Functional Requirements

The group discussed the list of user or functional requirements and separated the items into three groups according to priority; A, crucial to the success of the project; B, important "value-added" features; and C, useful, but not important to the success of the project. Attachment B to this document presents the matrix of user requirements by priority.

Discussion of Pilot Test Results

The members of the group then focused their attention on the results of the pilot testing of the proposed CIMS software, EPOCH, created by Logical Data Solutions, Inc. (LDS). Several users expressed strong concern about the program, specifically confusing labels on data fields and nonintuitive screen layouts. The members discussed various features of EPOCH they would like to have changed. The changes recommended include:

- ✓ Changing the main menu screen to incorporate cascading menus, similar to those used in MicroSoft-based products
- ✓ Allowing the user to search for a container by the name of the chemical in the container, rather than searching by the container identification number

- ✓ Rearranging the columns on the container picklist screen so that the column order is: container identification number, chemical name, location, container size, and status
- ✓ Allowing the user to sort the information on the container picklist screen by clicking on the column headers
- ✓ Adding the option of viewing the chemical master file information for a container displayed on the container picklist screen
- ✓ Adding "lab pack" to the list of disposal codes
- ✓ Changing the edit label on the container picklist screen to edit/view
- ✓ Changing other labels that are confusing or misleading

The changes listed above are additional recommendations beyond those identified by the users during pilot-testing (refer to Attachment C). The group also discussed whether changes would be sufficient to ensure usability of the software at the facility level. The group discussed the following means of addressing this issue:

- Modify EPOCH
- Examine a specified group of packages used by other government agencies, such as the software package used by Wright-Patterson Air Force Base
- Reperform phase 1
- Write a customized program for NOAA
- Use EPOCH as an interim solution
- Enter into a partnership with another agency to develop a custom program or to modify an existing program

The group then decided to address this issue through the following approach:

3) Discuss the changes with LDS, the vendor of the EPOCH software
4) Examine the software package used at Wright-Patterson Air Force base
5) Perform a life-cycle cost benefit analysis of off-the-shelf software versus custom programmed software
6) Discuss the findings at the next meeting of the users group, scheduled for September 15 though 18, 1998

Discussion of Publicity Actions to be Taken

Because of the length of the discussion of the results of the pilot testing, this discussion was postponed.

Action Items

The following action items were identified on the first day of the meeting:

- ✓ Develop a standard MOU under which universities and other outside entities can use CIMS
- ✓ Add the new members of the users group to the users group contact list, update information about existing members, and distribute the revised list to all members of the group
- ✓ Document the rationale for the decision that biological and infectious materials and wastes are not to be tracked, and that radioactive materials are to be tracked
- ✓ Form the focus groups discussed by the members
- ✓ Hold conference calls with the participants in the focus groups to discuss issues and develop proposed resolutions to those issues
- ✓ Determine the necessity of issuing a warning to NOAA CAMEO users that NOAA employees cannot take aggressive action in an emergency situation

After the discussion of the results of the pilot-testing, the group adjourned for the day.

3.0 WEDNESDAY, JULY 8, 1998

On the second day of the meeting, the members of the users group discussed several topics, including whether to track consumer products, and whether to track archived or historical samples.

Discussion of Whether to Track Consumer Products

Mr. Walker began the discussion and conveyed to the group that staff of the NWS had expressed the need to be able to track consumer products in the database. The group had decided previously that consumer products would not be tracked because of the additional effort required of the central administrator to maintain such data and the lack of a regulatory reporting requirements that mandates such tracking. The members of the users group agreed to change that decision and agreed further that the decision whether to track consumer products would be left to the discretion of the staff of the individual facility. However, the users group also agreed to recommend strongly against tracking of office and janitorial supplies and to strive to educate software users about which materials required tracking.

Discussion of Whether or Not to Track Archived or Historical Samples

Several members of the users group expressed the desire of facility staff to track archived or historical specimen samples in the CIMS database. Previously, the group had decided tentatively that specimen samples would not be tracked for the same reasons that consumer products would not be tracked. However, some members expressed the need to use the database to facilitate tracking of storage capacities. The members of the users group agreed to change that decision and agreed further that the decision whether to track archived or historical samples would be left to the discretion of the staff of the individual facility.

Discussion of Prioritization of Policies and Procedures

The group discussed the list of policies and procedures to be prepared. The group decided to separate the policies and procedure into groups based on the priority for preparation, as follows:

group A, to be prepared before inventorying the pilot facilities; group B, to be prepared before nationwide implementation; and group C, to be prepared during nationwide implementation. Attachment D presents the results of the group' s discussion.

Discussion of New Policies and Procedures

Because of the length of the discussion of the other topics, this discussion was postponed.

Discussion of Hazardous Materials Handling Plan

Ms. Kennedy stated that there is a need to establish a review process for projects with which environmental, safety, or health concerns are associated. The purpose of the process would be to facilitate a dialogue between facility staff and the environmental compliance staff, she continued. She stated that an upfront review process conform to the practices recommended in chapter 2 of the National Research Council' s handbook Prudent Practices in the Laboratory. Ms. Kennedy commended Mr. Ulrich for his method of reviewing and approving experiments and presented the concept to the group. The process starts with a plan prepared by the scientist, she continued. The plan presents important information, including the types and quantities of chemicals to be used in the experiment and the purpose and duration of the experiment. The environmental compliance staff would review and approve the plan, and provide the scientist with a list of conditions, she concluded. Agreeing that a review process should be established, the members of the group decided to form a focus group to develop such a process.

Action Items

The following action items were identified on the second day of the meeting:

- ✓ Form a focus group to develop an environmental, safety, and health review process
- ✓ Hold a conference call for the members of the new focus group before the next meeting of the users group

After the discussion of the review process, the group adjourned for the day.

4.0 THURSDAY, JULY 9, 1998

On the third and final day of the meeting, the members of the users group discussed revisions of

existing policies and procedures. Two presentations about CIMS were made; one to NOAA' s management and one to NOAA' s information technology (IT) staff.

Presentation of CIMS to NOAA Management

Ms. Kennedy presented an overview of the CIMS project for NOAA' s line office administrators. Her presentation included information about the background of and need for CIMS, a description of the project, and a description of the costs associated with the project. Ms. Kennedy stated that the CIMS Initiative was established to address issues related to the regulatory liability associated with management of hazardous materials; historical neglect of environmental, safety, and health regulations governing the management of such materials; and acquisition of property and hazardous materials at those properties. Specifically, she said, audit findings indicated that, nationwide, hazardous materials were being managed improperly. Numerous incidents had occurred at NOAA facilities, putting the agency and NOAA employees in jeopardy, she continued. Further, numerous regulatory requirements were not being met. Ms. Kennedy suggested to the Assistant Administrator of OFA three options for implementing a tracking system; 1) individual line offices could contract for a system, 2) individual facilities could contract for a system, or 3) NOAA could purchase a nationwide system. The third option had been selected.

Ms. Kennedy also briefly described the CIMS Initiative. CIMS began exclusively as a chemical inventory tracking system. It had evolved, however, she said, into a cradle-to-grave chemical information management system that includes other tools, such as policies and procedures. CIMS satisfies the current needs described above, but also will be able to meet future needs. Ms. Kennedy then explained the management structure of the CIMS Initiative, as well as the three phases of implementation.

Finally, Ms. Kennedy addressed the issue of funding for the initiative. Phases 1 and 2, she explained, would be funded by OFA. Phase 3, however, was to be funded by the individual line offices, on the basis of the number of facilities associated with a particular line office that will use the system. The cost for Phase 3 had not yet been determined, Ms. Kennedy added. She assured

the members of the group that she would keep them advised of any new information about Phase 3 costs. In closing, Ms. Kennedy thanked the NOAA managers for attending the meeting.

Presentation to NOAA's Information Technology Staff

Mr. Paul discussed the ECEA process for the IT staff. Ms. Albert then discussed the current status of the initiative, as well as the lessons learned from the pilot-testing phase. Ms. Albert explained that the pilot test of the EPOCH software package had been completed and that several lessons related to NOAA's IT structure had been learned. Specifically, local area network (LAN) administrators have autonomy over the personal workstation configurations at their facilities; each had configured the workstations in a different manner. That circumstance caused problems in the installation of the EPOCH software. For example, some LAN administrators restricted users from saving to their computers' hard drives. Since the software is client/server-based, such a restriction prevented the users from downloading the client portion of the software. Once the problem had been diagnosed, the users obtained authority to copy the program to their hard drives, but valuable testing time had been lost.

Ms. Albert also discussed performance problems related to the methods used by participants in the pilot test to gain access to the server on NOAA's wide area network (WAN). Several members of the IT group asked for clarification of the term WAN. Ms. Albert explained that the program is housed on NOAA's DEC-Alpha sever in Landover, Maryland. IT group members then expressed great concern about the use of the WAN. Several mentioned that NOAA recently had released a systems architecture document that specified that all NOAA applications should be World Wide Web (Web)-enabled. Web-enabled software had been chosen as the standard because it alleviates the problem of incompatibility among platform configuration, they pointed out. Ms. Albert asked what measures were being taken to address issues associated with the Web, such as security and performance. IT staff mentioned that the line offices have submitted a proposal requesting funds to increase band width, thereby addressing performance issues.

In light of the information set forth above, the members of the group decided to reevaluate the

options of purchasing a software package that is Web-enabled and of having a system custom-programmed for NOAA. The issue was tabled pending further investigation by Mr. Paul.

Action Items

The following action item was identified on the third day of the meeting:

- ✓ Evaluate commercially available software packages that are Web-enabled, as well as the option of having a contractor custom-program a system for NOAA

Last, after a brief discussion, the users group scheduled its next meeting for September 15 through 17, 1998. The meeting then was adjourned.

ATTACHMENT A

CIMS STRATEGIC PLAN

Goal	Objective	FY 1998 Phase 2 Performance Goals	FY 1999 Phase 2 Performance Goals	FY 2000 Phase 3 Performance Goals	FY 2001 Phase 3 Performance Goals

Goal	Objective	FY 1998 Phase 2 Performance Goals	FY 1999 Phase 2 Performance Goals	FY 2000 Phase 3 Performance Goals	FY 2001 Phase 3 Performance Goals
Develop an integrated chemical management system to ensure safety of employees, protection of the environment, and compliance with applicable environmental regulations governing the management of hazardous materials.	Objective 1: Create standard policies, procedures, and checklists for NOAA implementation related to the management of chemicals.	Complete Policies and Procedures: - Determination of What to Track - New Chemical Purchasing - Chemical Screening - Shipboard Hazardous Materials Policy for Visiting Parties - Field Locations Hazardous Materials Policy	Complete Policies: - Conflict Resolution for Disputes between Owners and Operators with Joint Operations for Hazardous Materials Handling - MOU Language for Third Party Use of CIMS - Language for Contractor Use of Chemicals - Use of Chemicals by Non-NOAA personnel at NOAA Facilities - Janitorial Services Contracts - Storing and Compatibility - Shipping and Packaging - Cleaning Containers - Reusing Containers and Labeling - Container Labeling - Inspection of Storage Areas - Consolidating Waste - Dress Code - Disposal at Foreign or Remote Ports - Posting Signs - Recording Transactions in EPOCH (Bar Coding, Tracking, Annual Inventorying, Reconciling Inventories) - Reporting - Tracking Shelf Life - MSDS Maintenance - Tracking and Complying with Storage Capacities - Purchasing of Chemicals in Non-USA Ports - Transfer of Chemicals to Other NOAA Facilities - Transfer of Chemicals to Non-NOAA Locations - Inspection of Hazardous Material Storage Buildings	Complete Policies: - Chemical Hygiene Plan - Hazard Communication Plan - P2/Waste Minimization Plan - Spill Prevention Plan - PPE and 1st Aid Plan - Hazardous Waste Disposal Plan - Records Keeping - Lockout/Tagout Plan - Respiratory Plan - Training Plan - Disposal of Radioactive Materials - Management of Radioactive Materials and Use on Vessels	

Goal	Objective	FY 1998 Phase 2 Performance Goals	FY 1999 Phase 2 Performance Goals	FY 2000 Phase 3 Performance Goals	FY 2001 Phase 3 Performance Goals
	Objective 2: Develop software tools to aid in the implementation of policy.	Complete pilot test. Evaluate results. Integrate supporting software packages (Cameo, web page, Reactivity, graphic user interface, and lists).	Load CIMS software on the NOAA server. Develop on-line help screens.	All facilities inventoried	
	Objective 3: Develop training for personnel.	Develop training.	Develop computerized tutorial. Develop user manual		
	Objective 4: Remove outdated and unneeded hazardous materials from NOAA facilities prior to inventorying procedures.		Remove from pilot facilities.	Remove from other NOAA facilities.	Audit facilities on compliance.
	Objective 5: Develop BMPs to achieve P2 and waste minimization.		Establish baseline for P2 and waste minimization (quantities).		Issue a lessons learned report.

Goal	Objective	FY 1998 Phase 2 Performance Goals	FY 1999 Phase 2 Performance Goals	FY 2000 Phase 3 Performance Goals	FY 2001 Phase 3 Performance Goals
	Objective 6: Reduce costs and maximize efficiencies in accordance with the CEMP.	Establish baseline costs. Determine baseline efficiencies. Audit system financially.		Promote CIMS partnering.	
	Objective 7: Support development of the EC enterprise architecture (ECEA).	Write the Concept of Operations documents. Test the Con Ops document. Assist with the ECEA baseline development.			
	Objective 8: Comply with environmental regulations.				Submit first agency-wide report.

ATTACHMENT B

PRIORITIZATION OF USER OR FUNCTIONAL REQUIREMENTS

ATTACHMENT C

RESULTS OF THE PILOT-TESTING

The results of the pilot-testing of the EPOCH software package are presented below. The issues are grouped by module and for each issue, a solution has been proposed.

I. CHEMICAL CONTAINER INVENTORY MODULE

Issue 1 The user needs to be able to sort containers by chemical name.

Proposed Solution Add to the Chemical Container Inventory module' s Container Picklist screen a pull down menu that allows the user to sort containers by chemical name.

Issue 2 The user needs easy access to chemical information while using the Chemical Container Inventory module.

Proposed Solution Once a container has been selected and the user goes to the Transaction Picklist for the container, allow the user to go to the Chemical Master File information for the chemical in the container.

Issue 3 The menu choice "LIST TRANS" is misleading and unclear.

Proposed Solution Change the menu choice to "DISPLAY CONT TRANS" to display container transactions.

Issue 4 The Container Picklist screen sometimes jumps to the right, which prevents the user from viewing the container number.

Proposed Solution Instruct Logical Data Solutions, Inc. (LDS) to correct the problem.

Issue 5 Change the label on the Container Picklist screen from "container id" and "segment number" to "bar code number."

Proposed Solution Instruct LDS to change the label.

II. CHEMICAL MASTER FILE

Issue 1 The user needs information about personal protective equipment (PPE), first aid, and spill response for chemicals.

Proposed Solution Integrate into CIMS the chemical information, including the Response Information Data (RIDS), which includes information on PPE, first aid, and spill response information, from the Computer Aided Management of Emergency Operations (CAMEO) database.

Issue 2 The user needs to be able to track the reactivity group number of a chemical. The information should be viewable from the Container Transaction screen.

Proposed Solution Add a field to track the information and display the information on the Container Picklist screen as an additional column.

III. HARDWARE ISSUES

Issue 1 For the users who are not hardwired to the wide area network (WAN), performance is slow during peak times of Internet use.

Proposed Solution Talk to Rob Swisher, Chief, NOAA Computer Division in Landover, Maryland about installing several high-speed modums so users can dial directly into the WAN.

Issue 2 Some users encountered problems related to incompatibility when installing the software and establishing the connection to the WAN.

Proposed Solution

Step 1 Create install packages specific to the various versions of Windows.

Step 2 Require users to call the technical support hotline and describe their computer setups before installing the software.

Step 3 If the technical support staff cannot resolve the incompatibility problem after working with the user for one hour, the technical support staff then would work directly with the facility' s computer administrator to do so.

Step 4 If the incompatibility issue cannot be resolved after working with the facility' s computer administrator for four hours, the administrator would send, by FedEx, software that allows the technical support staff to view the facility' s computer and work on the problem directly.

Issue 3 If the WAN is down for service or some other reason, the user is presented the message " Invalid Password." The user then incorrectly believes that there is a problem with the machine or the password entered.

Proposed Solution Ask Rob Swisher to change the message to reflect the true nature of the problem, such as presenting the message, "WAN is currently inaccessible; service activities are being performed. Please contact (name of individual) at (telephone number) if you have any questions."

Issue 4 If the WAN is down for service or some other reason, the user is unable to gain access to the facility's information.

Proposed Solution Discuss with Rob Swisher the possibility of establishing a method that allows users access to their facilities' information in an emergency situation, and of installing a clone on another server.

IV. REPORTING ISSUES

Issue 1 Before the user can run the Tier 2 report, the annual inventory must be summarized. Currently *Summarize Annual Inventory* and the *Generate a Tier 2 Report* are two separate commands in two separate areas. This arrangement is confusing to the user, especially since the report is generated only once a year; therefore, the process would not be fresh in the user's mind.

Proposed Solution Add a prompt in the Tier 2 reporting screen that asks the user (yes/no) if he or she wants to summarize the annual inventory before running the report.

Issue 2 When exiting any of the standard reports, the user can select *Exit* or *Exit All*. It is difficult for the user to know the difference between the two commands.

Proposed Solution Add an explanation to the user manual (to be developed) to describe the difference between the two commands: *Exit* allows the user to temporarily exit the report, generate other reports, and then compare the reports generated, while *Exit All* allows the user to exit the report completely.

22. OTHER ISSUES

Issue 1 Users experience difficulties in performing some activities required in EPOCH.

Proposed Solution Develop a user manual that provides step-by-step procedures for performing necessary activities. The user manual should provide illustrations of screens and detailed instructions and should be presented by activity, such as disposing of a container and contents as waste.

Issue 2 The Container Picklist screen should list the containers numerically.

Proposed Solution Discuss with LDS the possibility of changing the way the database sorts and presents the containers.

Issue 3 It would be helpful to the user to have the database automatically generate the bar code sequence numbers.

Proposed Solution The database should not generate the bar code number automatically, since users will be using preprinted bar code labels. Failure to use the labels in sequence would interfere with data entry.

ATTACHMENT D

PRIORITIZATION OF POLICIES AND PROCEDURES

Policy and Procedure Name	Lead	Priority
Contracting		
Language for Use of Chemicals by Contractors at NOAA Facilities	Laura Seabeneck	B
Use of Chemicals by Non-NOAA personnel at NOAA Facilities	Laura Seabeneck	B
Janitorial Services Contracts	Laura Seabeneck	B
Waste Management		
Consolidating Waste	Barbara Jobe	A
Disposal at Foreign or Remote Ports	Tetra Tech - Regi Chikar	A
Storage		
Tracking Shelf Life	Tetra Tech - Debbie Albert	A
Inspection of Storage Areas	Lynnette Ansell	A
Tracking and Complying with Storage Capacities	Tetra Tech - Debbie Albert	A
Storing and Compatibility	Tetra Tech - Debbie Albert	A
Requirements for Hazardous Material Storage Buildings	Laura Seabeneck	B
Container Management		
Container Labeling	Tetra Tech - Debbie Albert	A
Cleaning, Reusing and Relabeling Containers	Laura Seabeneck	B
Other		
Dress Code	Barbara Jobe Lynnette Ansell	A
Recording Transactions in EPOCH (Bar Coding, Tracking, Annual Inventorying, Reconciling Inventories)	Tetra Tech - Debbie Albert	A
Transfer of Chemicals to Other NOAA Facilities	Tetra Tech - Debbie Albert	A

Policy and Procedure Name	Lead	Priority
Posting Signs	Tetra Tech - Debbie Albert	B
Policy for Transferring Chemicals	Tetra Tech - Debbie Albert	B
Reporting	Tetra Tech - Debbie Albert	B
MSDS Maintenance	Tetra Tech - Debbie Albert	B
Purchasing of Chemicals in Non-USA Ports	Tetra Tech - Regi Chikar	B
Shipping and Packaging	Tetra Tech - Debbie Albert	B
Transfer of Chemicals to Non-NOAA Locations	Tetra Tech - Regi Chikar	B